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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, ~~1904~~ 1902.

No. ~~209~~ 84.

JOSEPH H. BEALS, PLAINTIFF IN ERROR,

vs.

JAMES J. CONE AND LYMAN ROBISON.

IN ERROR TO THE SUPREME COURT OF THE STATE OF COLORADO.

FILED APRIL 20, 1901.

(18,122.)

(18,122.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1901.

No. 300.

JOSEPH H. BEALS, PLAINTIFF IN ERROR,

vs.

JAMES J. CONE AND LYMAN ROBISON.

IN ERROR TO THE SUPREME COURT OF THE STATE OF COLORADO.

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1 In the Supreme Court of the State of Colorado.

Pleas before the honorable the supreme court of the State of Colorado, sitting at Denver, in said State, at a term thereof begun and held at the capitol building, in said city, on the second Monday in April, A. D. 1898, and of the Independence of the United States the one hundred and twenty-second.

Present: Hon. John Campbell, chief justice; Hon. Luther M. Goddard, associate justice; Hon. William H. Gabbert, associate justice; Hon. David M. Campbell, attorney general; Felix A. Richardson, bailiff; Horace G. Clark, clerk of said court.
Attest: HORACE G. CLARK, *Clerk.*

Be it remembered that heretofore and on to wit: the 18th day of June, A. D. 1898, there was filed in the office of said clerk the following transcript of record, bill of exceptions and assignment of errors, which are in words and figures as follows, to wit:

2 UNITED STATES OF AMERICA.

STATE OF COLORADO, } ss:
County of El Paso, }

Pleas before Honorable Horace G. Lunt, one of the judges of the district court of the fourth judicial district of the State of Colorado, sitting within and for El Paso county, in said State, in division two thereof, at a term begun and held at the court-house, in the city of Colorado Springs, in the county and State aforesaid, on the 11th day of May (it being the second Monday), A. D. 1896, and of the Independence of the United States the one hundred and nineteenth.

Present: Hon. Horace G. Lunt, judge aforesaid; Henry M. Blackmer, district attorney; W. S. Boynton, sheriff of said county; Edgar Howbert, clerk of said court.
Attest: EDGAR HOWBERT, *Clerk.*

Be it remembered that heretofore and on to wit: the 26th day of June, A. D. 1896 there was filed in the office of the clerk of said court the complaint, which is in words and figures as follows, to wit:

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court of said County.

3 JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants.

The plaintiff complains and alleges:
1. That on or about the first day of January, 1893, and ever since

hitherto he was, and now is the owner and in actual possession and occupation of the Tecumseh Lode mining claim fifteen hundred feet in length by three hundred feet in width, situate in Cripple Creek mining district, county and State aforesaid.

2. That the plaintiff is, and at all times mentioned in this complaint hath been, a citizen of the United States.

3. That he claims the legal right to occupy and possess said premises and is entitled to the possession thereof by virtue of full compliance with the local laws and rules of miners in said mining district, the laws of the United States and of said State of Colorado, and by actual prior possession, as a lode mining claim, located on the public domain of the United States.

4. That on or about the first day of April, 1896, the defendants wrongfully entered upon parcel of said claim, to wit: all that part of said claim which is intersected by the exterior lines of survey No. 7644 known as the Ophir Lode mining claim, as shown by plat marked Exhibit B filed on the 17th day of June, 1896, in the land office of the United States, at Pueblo, Colorado, with the adverse claim of said plaintiff against the entry of said survey lot for patent, such ground so intersected being described as follows:

4 Beginning at cor. No. 3, Tecumseh lode, thence N. 60° 38′ W. 250.17 ft. to corner No. 3 Ophir lode; thence N. 29° 22′ E. 1357.79 feet to cor. No. 4 Ophir lode; thence S. 60° 38′ E. 300 ft. to cor. No. 1 Ophir lode; thence S. 29° 22′ W. 8.60 feet to intersecting lines 1–2 Ophir lode and 1–2 Tecumseh lode; thence S. 35° 56′ W. 699.16 ft. to cor. No. 2 Tecumseh lode; thence S. 26° 40′ W. 655.34 ft. to place of beginning.

5. That defendants have ever since said last-mentioned date hitherto wrongfully withheld the possession of said parcel of said Tecumseh lode from the plaintiff to his damage in the sum of one thousand dollars.

6. That this suit is brought in support of said adverse claim, and that plaintiff necessarily disbursed, expended and paid out the sum of twenty-five dollars for plats, abstracts and copies of papers filed in said land office with his adverse claim, and also a reasonable counsel fee, to wit: seventy-five dollars, for the expense of preparing his said adverse claim.

Wherefore, plaintiff prays judgment against the defendants:

1. For the recovery of the possession of said parcel of the said Tecumseh Lode mining claim.

2. For the sum of one thousand dollars damages.

3. For the sum of one hundred dollars expended in support of said adverse claim.

4. For costs of suit.

H. B. JOHNSON,
Attorney for Plaintiff.

5 Endorsed: No. 4086. In the district court. Joseph H. Beals, plaintiff, *vs.* James J. Cone and Lyman Robison, defendants. Filed in the district court of El Paso county, Colorado, Jun- 25 1896. Edgar Howbert, clerk, by L. H. McDill, deputy. H. B. Johnson, attorney for plaintiff.

And thereafter and on to wit: the 4th day of August A. D. 1896, there was filed in the office of the clerk of said court the answer which is in words and figures as follows, to wit:

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court of and for said County.

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants. } Gen. No., 4086.

The said defendants, by way of answer unto the complaint of the above-named plaintiff, in this action filed,

I.

Deny each and every allegation contained therein; and

II.

The said defendants, for their second defence, and by way of a counter-claim, herein, allege:

That said defendants are, and that their grantors are, respectively, and at all times hereinafter referred to have been, citizens of the United States of America; and

That before and at the commencement of this action, and
6 ever since, to wit: the third day of February A. D. 1892, and before the alleged discovery of the Tecumseh Lode mining claim mentioned in the complaint herein, said defendants and their grantors respectively, were, and the defendants still are, the owners of the Ophir Lode mining claim referred to in said complaint; that the said Ophir Lode mining claim is situated in the Cripple Creek mining district in said county of El Paso and State of Colorado; that said Ophir Lode mining claim was and is fifteen hundred feet in length and three hundred feet in width; that the same is of record at page 37 in Book 4 of the Locations Records of said county of El Paso in the office of the county clerk *ex officio* recorder, thereof; that the defendants are entitled to the possession of the ground and premises in dispute in this action; that the defendants have and claim the legal right to occupy and possess the said Ophir Lode mining claim under the laws of the United States and under the local laws and rules of the State of Colorado and of said Cripple Creek mining district; and that the legal right is held and claimed by virtue of compliance with said laws and rules and by virtue of actual prior possession of and upon the public domain of said United States by and on the part of the defendants and their grantors, respectively; and

That on, to wit, the third day of February, A. D. 1892, John Hubbard and J. E. Smith entered upon the public, unappropriated domain of the United States in said Cripple Creek mining district in said county of El Paso and State of Colorado, and thereon did discover a vein, lode and deposit of mineral-bearing rock carrying gold, and did then and there at the place of said discovery post a

plain sign and notice, and that sign and notice contained the names of said Hubbard and Smith the discoverers thereof, and the name of said Ophir lode and said date of the discovery there-
7 of; and, that afterwards within sixty days from said date of discovery of said Ophir lode said discoverers did on said vein, lode and deposit sink a discovery shaft, that said discovery shaft was then and there sunk to the depth of more than ten feet below the lowest rim of that shaft at its surface, and in that shaft they did find and disclose and did uncover a lode and deposit of rock in place carrying gold; that said discoverers did within three months from the date of their said discovery of said Ophir lode distinctly mark the surface boundaries of said Ophir Lode mining claim on the ground, and did set thereon six substantial posts at each corner and one at the center of each side line of said Ophir Lode mining claim marked on their sides which were in toward the claim, and set into the ground, and said discoverers did also within said three months after said discovery of said Ophir lode cause to be filed in said office of said county clerk, *ex officio* recorder, of said El Paso county said John Hubbard and J. E. Smith's certificate of the location of the said Ophir Lode mining claim; and, that in said certificate of the said location were contained the names of said locators, the name of said Ophir lode, a description of said Ophir Lode mining claim located by reference to a permanent monument sufficient to identify said Ophir Lode mining claim, the number of feet on each side of the center of said discovery shaft, and the general course of the lode aforesaid as near as might be; and

That at all times mentioned herein the said John Hubbard and J. E. Smith, their grantors and the defendants were over the age of twenty-one years; and

That through and by means of intervening conveyances
8 commencing with said locators these defendants have become and are the sole owners of the said Ophir Lode mining claim, including the premises in dispute herein, and that the ground and premises in dispute herein comprise part and parcel of said Ophir Lode mining claim; and

That by reason of the claiming and taking of the premises herein in dispute by the plaintiff as a part of his alleged Tecumseh Lode mining claim, these defendants are damaged in the sum of fifteen hundred dollars.

Wherefore these defendants pray:

1. That the defendants be adjudged the owners of and entitled to the possession of the premises in dispute herein.
2. That the defendants have and recover said sum of fifteen hundred dollars damages.
3. That the defendants have general and all proper relief, the premises considered.
4. That the defendants have and recover costs herein.
5. That the plaintiff recover nothing herein.

SAMUEL P. DALE,
Attorney for the Defendants.

Attorney's residence: Canyon City, Colorado.

Endorsed: No. 4086. El Paso district court. Joseph H. Beals vs. James J. Cone and Lyman Robison. Answer, containing counter-claim. Filed in the district court of El Paso county, Colorado, Aug. 4th 1896. Edgar Howbert, clerk, by L. H. McDill, deputy. Samuel P. Dale, Canyon City, Colo., att'y for def'ts.

9 And thereafter and on to wit: the 12th day of August A. D. 1896 there was filed in the office of the clerk of said court the replication, which is in words and figures as follows, to wit:

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court in and for said County.

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants. } No. 4086.

Now comes the plaintiff in the above-entitled cause, and for replication to the answer and counter-claim of defendants herein deny each and every allegation therein contained, and again prays judgment.

H. B. JOHNSON,
Attorney for Plaintiff.

Endorsed: No. 4086. In the district court in and for said county. Joseph H. Beals, plaintiff, *vs.* James J. Cone and Lyman Robison, defendants. Filed in the district court of El Paso county, Colorado, Aug. 12 1896. Edgar Howbert, clerk, by Robert H. Widdicombe, deputy. H. B. Johnson, attorneys for plaintiff.

And thereafter and on to wit: the 21st day of May, A. D. 1897, there was filed in the office of the clerk of said court the amended replication which is in words and figures as follows, to wit:

10 STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court of El Paso County.

JOSEPH H. BEALS }
vs.
J. J. CONE ET AL. }

Now comes the plaintiff in the above-entitled cause, and, for replication to the answer and counter-claim of defendants herein, deny each and every allegation therein contained.

And for further replication plaintiff alleges that defendants on February 10, 1893, made a mineral entry which included said Ophir lode; that subsequently this plaintiff, with others, filed a protest against that portion of the entry which related to said Ophir lode; that said protest alleged, among other things, that there had been

no discovery of any vein, lode, ledge or deposit of mineral on said Ophir lode; that the Commissioner of the General Land Office directed the register and receiver of the local land office at Pueblo, Colorado, to order a hearing of said protest, which was done, and which hearing took place on October 11, 1893; that at such hearing defendants appeared in person and by counsel, and defendant Cone testified thereon; that the testimony taken at such hearing was reduced to writing as given, and immediately subscribed by the witnesses; that upon appeal to the Commissioner of the General Land Office, such Commissioner found and adjudicated that there had been no discovery on October 11, 1893, on said Ophir lode, and on appeal to the Secretary of the Interior such Secretary found and adjudicated, on December 28, 1895, and again on March 11,
11 1896, that no discovery had been made; that, in pursuance of such findings and adjudications, the said mineral entry was cancelled as to said Ophir lode; that it was further found and adjudicated by said Commissioner and Secretary that the discovery shaft on said Ophir lode was, on October 11, 1893, only twenty-five feet deep, and that the sinking of this shaft was the only work that defendants had ever performed on said lode prior to that time.

And plaintiff, for further replication, alleges that on said hearing on October 11, 1893, the defendants appeared by their duly authorized attorney, and defendant J. J. Cone appeared in person; that on said hearing said Cone testified that shortly prior to giving his testimony he measured defendant's discovery shaft on said Ophir claim with a tapeline and that it was twenty-five feet deep, that no vein was discovered on or in the Ophir, and that no work had been done on said lode in the year 1893; that said testimony induced plaintiff, and others interested under him, to expend a large sum of money in exploring for mineral in the ground in conflict between the said Ophir and Tecumseh lodes, and in working and developing the said Tecumseh lode; that defendants knew at all times that plaintiff, and others under him, were making such expenditures on the faith of the truth of said testimony, and never contradicted the same; that if, on October 11, 1893, the defendants had done any work in 1893, or had ever sunk their discovery shaft to a greater depth than twenty-five feet, or had ever discovered a vein in such shaft or in said Ophir lode, this plaintiff, and those acting under him, in the working and developing of said Tecumseh lode, were entirely ignorant of the fact; that plaintiff and those acting
12 under him have expended in the development of said Tecumseh lode between ten and fifteen thousand dollars on the faith of the truth of said testimony, which defendants are now attempting, by denying the truth thereof, to take the entire benefit of; that to permit defendants to now dispute the truth of said testimony would work a fraud upon plaintiff and others acting under him in the expenditure of money as aforesaid in the working and developing of said Tecumseh mine.

Wherefore plaintiff prays judgment.

1. That defendants be precluded from relitigating the questions adjudicated as aforesaid.

2. That defendants are estopped from disputing the testimony aforesaid.

H. B. JOHNSON,
RALPH W. SMITH,
Attorneys for Plaintiff.

We hereby consent that the above-amended replication may be filed without leave of court, subject to our right to demur, or move to strike from the files.

THOMAS, BRYANT & LEE,
Attorneys for Defendants.

Endorsed: No. 4086. In the district court of El Paso county. State of Colorado. Joseph H. Beals *vs.* J. J. Cone *et al.* Amended replication. Filed in the district court of El Paso county, Colorado, May 21 1897. Edgar Howbert, clerk, by E. C. Davis, deputy H. B. Johnson, Ralph W. Smith, attorneys for plaintiff.

13 And thereafter and on to wit: the 22nd day of May, A. D. 1897, there was filed in the office of the clerk of said court, the demurrer, which is in words and figures as follows, to wit:

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court in and for said County.

JOSEPH H. BEALS, Plaintiff, }
vs.
J. J. CONE ET AL., Defendants. }

The above defendant- by Sam. P. Dale and Thomas, Bryant & Lee, their attorneys, now come and demur to the second and third replications of the complaint heretofore filed in said cause; and as to the second replication these defendants say that the same does not state facts sufficient to constitute a defense against the answer and counter-claim of the defendants herein; that the said replication is in effect a plea of *res adjudicata* to the said counter-claim of the defendants, and that the matters and things therein alleged do not constitute an adjudication of any of the matters and things in said counter-claim set forth.

And for cause of demurrer to the third replication of the said plaintiff, these defendants say that the same does not state facts sufficient to constitute a defense to the answer and counter-claim of these defendants, because they say that the same assumes to be a plea of estoppel to the defendants' said counter-claim, and that the matters and things therein set forth do not constitute an estoppel, either equitable or otherwise, against these defendants.

14 Wherefore, these defendants pray judgment against the said plaintiff as to said replication.

SAM. P. DALE AND
THOMAS, BRYANT & LEE,
Attorneys for Defendants.

Endorsed: No. 4086. Joseph H. Beals *vs.* J. J. Cone *et al.* Demurrer to repiication & notice to same. Filed in the district court of El Paso county, Colorado, May 22 1897. Edgar Howbert, clerk. By E. C. Davis, deputy. Sam. P. Dale & Thomas, Bryant & Lee, attorneys for def'ts.

Pleas before Honorable Horace G. Lunt, one of the judges of the district court of the fourth judicial district of the State of Colorado, sitting within and for El Paso county, in said State, in division one thereof, at a term begun and held at the court-house, in the city of Colorado Springs, in the county and State aforesaid, on the 10th day of May (it being the second Monday in May), A. D. 1897, and of the Independence of the United States the one hundred and twentieth.

Present: Hon. Horace G. Lunt, judge aforesaid; Henry M. Blackmer, district attorney; W. S. Boynton, sheriff of said county; Edgar Howbert, clerk of said court.
Attest: EDGAR HOWBERT, *Clerk.*

15 Be it remembered that heretofore and on to wit: the 24th day of May A. D. 1897, the same being one of the days of the regular May A. D. 1897 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants. } Adverse.

At this day in open court comes the said plaintiff by Johnson & Smith, his attorneys, and the said defendants by Thomas, Bryant & Lee, their attorneys, also come. And thereupon this cause coming on for hearing before the court upon the demurrer of the said defendants to the second and third amended replications herein, is argued by counsel and submitted to the court, and is by the court sustained.

Pleas before Honorable Ira Harris, one of the judges of the district court of the fourth judicial district of the State of Colorado, sitting within and for El Paso county, in said State, in division two thereof, at a term begun and held at the court-house, in the city of Colorado Springs, in the county and State aforesaid, on the 10th day of May (it being the second Monday in May), A. D. 1897, and of the Independence of the United States the one hundred and twentieth.

Present: Hon. Ira Harris, judge aforesaid; Henry M. Blackmer, district attorney; W. S. Boynton, sheriff of said county; Edgar Howbert, clerk of said court.
16 Attest: EDGAR HOWBERT, *Clerk.*

Be it remembered that heretofore and on to wit: the 14th day of June, A. D. 1897, the same being one of the days of the regular May

A. D. 1897 term of said court the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants. } Adverse.

At this day in open court comes the plaintiff by his attorneys Johnson & Smith, Esqs., and the defendants by their attorneys, Thomas, Bryant & Lee, Esqs., also come. Thereupon this cause coming on to be heard upon the motion of defendants to set aside the verdict of the jury herein, and for a new trial of this cause, *which* is argued by counsel and submitted to the court and by the court taken under advisement.

And thereafter and on to wit: the 22nd day of June, A. D. 1897, the same being one of the days of the regular May A. D. 1897 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

17 JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants. } Adverse.

At this day in open court come the said parties by their attorneys respectively.

And thereupon this cause coming on for hearing before the court upon the motion of defendant- for a new trial of this cause, heretofore argued and submitted to the court, and the court being now sufficiently advised in the premises, doth deny said motion, and orders that judgment in accordance with the verdict of the jury in this cause be entered in the judgment book.

Which said judgment is in words and figures as follows, to wit:

And thereafter and on to wit: the 22nd day of June A. D. 1897, the same being one of the days of the regular May A. D. 1897 term of said court the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE & LYMAN ROBISON, Defendants. }

The jury by whom the issues joined in this cause was tried, having found by their verdict that the defendants, at the time of the commencement of this suit, were guilty of unlawfully withholding from the plaintiff the premises described in his complaint
18 in this cause, to wit:

Beginning at cor. No. 3, Tecumseh lode, thence N. 60° 38′ W. 250.17 ft., to corner No. 3 Ophir lode; thence N. 29° 22′ E. 1,357.79 ft. to cor. No. 4 Ophir lode; thence S. 60° 38′ E. 300 ft. to cor. No. 1 Ophir lode; thence S. 29° 22′ W. 8.60 ft. to intersecting lines 1–2 Ophir lode and 1–2 Tecumseh lode; thence S. 35° 56′ W.

699.16 ft. to cor. No. 2 Tecumseh lode; thence S. 26° 40′ W. 655.34 ft. to place of beginning, situate in the Cripple Creek mining district, El Paso county, Colorado; and that the plaintiff is well entitled to hold and possess the same as a lode mining claim by virtue of a full compliance with the laws of the United States and the State of Colorado, therefore it is considered and adjudged that the plaintiff do have and recover against the said defendants the possession of said premises, according to the verdict of the jury aforesaid, and that he have a writ of possession therefor, according to the form, effect and force of his said recovery; and it is further considered and adjudged that plaintiff do recover against the defendants his costs in this behalf laid out and expended, and that he have execution therefor; and it is further considered and adjudged that a certain injunction heretofore issued out of this court in aid of the defendants in this cause, be and the same hereby is dissolved.

By the court:

IRA HARRIS, *Judge.*

19 And thereafter and on to wit: the 28th day of June A. D. 1897 the same being one of the days of the regular May A. D. 1897 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants. } Adverse.

It appearing to the court that all the costs recovered by the plaintiff in the above-entitled cause have been paid by the defendants. Now, therefore, on application of said defendants by Thomas, Bryant & Lee, their attorneys, therefor, it is ordered and adjudged,

That the judgment heretofore rendered in said cause in favor of the plaintiff and against the said defendants be and the same is hereby wholly vacated and set aside, and that the defendants be and they are hereby granted a new trial of the issues in said case.

And it is further ordered that the said cause now stand for trial upon the issues therein found in all things as though the same has never been tried.

Done in open court this twenty-eighth day of June A. D. 1897.

IRA HARRIS, *Judge.*

20 And thereafter and on to wit: the 3rd day of July A. D. 1897, there was filed in the office of the clerk of said court the motion, which is in words and figures as follows, to wit

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } No. 4086.

Now at this day comes the plaintiff in the above-entitled cause and moves the court to set aside the order heretofore entered granting defendants a second trial herein for the following reasons:

1. Because said order was entered without notice to, or the knowledge of, the plaintiff or his attorneys or either of them.
2. Because defendants have no legal right to such second trial.

JOHNSON & SMITH,
Attorneys for Plaintiff.

Pleas before Honorable Ira Harris, one of the judges of the district court of the fourth judicial district of the State of Colorado, sitting within and for El Paso county, in said State, in the city
21 of Colorado Springs, in the county and State aforesaid, on the 10th day of January, A. D. 1898 (it being the second Monday in January), and of the Independence of the United States the one hundred and twenty-first.

Present: Hon. Ira Harris, judge aforesaid; Henry McAllister, Jr., district attorney; W. S. Boynton, sheriff of said county; Edgar Howbert, clerk of said court.

Attest: EDGAR HOWBERT, *Clerk.*

Be it remembered that heretofore and on to wit: the 9th day of February A. D. 1898 the same being one of the days of the regular January A. D. 1898 term of said court the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants, } Adverse.

At this day in open court comes the said plaintiff, by his attorneys, Johnson & Smith, and T. C. Early, Esqrs., and the defendants, by their attorneys, C. S. Thomas and S. P. Dale, Esqrs., also come. Thereupon the defendants demand a jury of twelve men which is granted. And thereupon comes a jury, to wit: E. W. Hull, Pat Donnelly, W. A. Woody, F. A. Mangold, W. Pring, James Catron, H. S. Poley, J. S. Arthur, Paul Pringle, D. L. Cell, J. E. Shobe, Geo. Harbaugh, twelve good and lawful men, and they are duly selected and tried, empanelled and sworn to well and truly try the
22 issues herein joined, and a true verdict find according to the evidence.

Thereupon on motion of said defendants, the plaintiff thereto consenting, it is ordered that the jury in this case be kept together

and in the charge of a bailiff during the recesses and adjournments of this court, while the trial of this cause is in progress.

And the said jurors, being each duly cautioned by the court not to converse among themselves, nor with others, touching the matters at issue herein, nor to listen to such conversation of others, nor to read nor hear read any publication bearing upon the same, are permitted to retire with a sworn bailiff to meet the court at its next incoming.

And thereafter and on to wit: the 10th day of February A. D. 1898, the same being one of the days of the January A. D. 1898 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

At this day in open court comes the said plaintiff by his attorneys, Johnson & Smith & T. C. Early, Esqrs., and the defendants by their attorneys, C. S. Thomas and S. P. Dale, Esqrs., also come.

And the said jurors being now all here present, and in the jury-box, the trial of the issues herein joined is resumed.

And thereupon comes the evidence, the hearing of which is continued to the hour of adjournment.

And the said jurors being each duly cautioned by the court not to converse among themselves, nor with others, touching the
23 matters at issue herein, nor to listen to such conversation of others, nor to read or hear read any publication bearing upon the same, are permitted to retire with the bailiff to meet the court at its next incoming.

And thereafter and on to wit: the 11th day of February, A. D. 1898, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } Adverse.

At this day in open court comes again the said plaintiff by his attorneys, Johnson & Smith & T. C. Early, Esqrs., and the defendants, by their attorneys, C. S. Thomas and S. P. Dale, Esqrs., also come.

And the said jurors being now all here present and in the jury-box the trial of the issues herein joined is resumed. And thereupon comes the evidence, the hearing of which is continued to the hour of adjournment.

And the said jurors being each duly cautioned by the court not to converse among themselves, nor with others touching the matters at issue herein, nor to listen to such conversation of others, nor to read nor hear read any publication bearing upon the same, are permitted to retire with the bailiff to meet the court at its next incoming.

24 And thereafter and on to wit: the 13th day of February, A. D. 1898 the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } Adverse.

At this day in open court comes the said plaintiff, by his attorneys, Johnson & Smith & T. C. Early, Esqrs., and the defendants by their attorneys C. S. Thomas & S. P. Dale, Esqrs., also come. And the said jurors being now all here present and in the jury-box, the trial of the issues herein joined is resumed.

And thereupon comes the evidence the hearing of which is continued to the hour of adjournment.

And the said jurors being each duly cautioned by the court not to converse among themselves nor with others touching the matters at issue herein, nor to listen to such conversation of others, nor to read nor hear read any publication bearing upon the same, are permitted to retire with the bailiff to meet the court at its next incoming.

And thereafter and on the 14th day of February A. D. 1898, the following proceedings, *inter alia*, were had and done, to wit:

25 JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } Adverse.

At this day in open court comes again the said plaintiff by his attorneys, Johnson & Smith & T. C. Early, Esqrs., and the said defendants by their attorneys, C. S. Thomas and S. P. Dale, Esqrs., also come. And the said jurors being now all here present and in the jury-box the trial of the issues herein joined is resumed.

And thereupon comes the evidence the hearing of which is concluded. Thereupon, on motion of plaintiff, the defendants consenting thereto, it is ordered that the jury visit the premises in controversy for the purpose of making an inspection thereof. Whereupon the court instructs the jury in relation to said view. Bailiffs are sworn to take charge of said jury and guides are appointed.

And the said jurors being each duly cautioned by the court not to converse among themselves, nor with others, touching the matters at issue herein, nor to listen to such conversation of others, nor to read nor hear read any publication bearing upon the same, are permitted to retire with the bailiffs to meet the court again upon their return from said inspection.

And thereafter and on to wit: the 16th day of February, A. D. 1898, the following proceedings, *inter alia*, were had and done, to wit:

26 JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } Adverse.

At this day in open court comes the said plaintiff by his attorneys, Johnson & Smith & T. C. Early, Esqrs., and the defendants

by their attorneys, C. S. Thomas & S. P. Dale, Esqrs., also come. And the said jurors being now all here present and in the jury-box, the trial of the issues herein joined is resumed.

Thereupon the said jury is instructed by the court. Whereupon comes the argument of counsel, which is continued to the hour of adjournment.

And the said jurors being each duly cautioned by the court not to converse among themselves, nor with others, touching the matters at issue herein, nor to listen to such conversation of others, nor to read nor hear read any publication bearing upon the same, are permitted to retire with the bailiff to meet the court at its next incoming.

And thereafter and on to wit: the 17th day of February, A. D. 1898, the following proceeding, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } Adverse.

27 At this day in open court comes again the said plaintiff, by his attorneys, Johnson & Smith, & T. C. Early, Esqrs., and the defendants by their attorneys, C. S. Thomas & S. P. Dale, Esqrs., also come. And the said *h*urors *b*eing now all here present and in the jury-box the trial of the issues herein joined is resumed.

Thereupon comes a continuation of the argument of counsel.

And the said jurors having heard all the evidence produced as well on behalf of the said defendants as of the said plaintiff, and having viewed the premises in controversy, and the argument of counsel, and being duly instructed by the court, retire to their room in charge of a sworn bailiff to consider of their verdict herein.

And thereafter and on to wit: the 18th day of February, A. D. 1898, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } Adverse.

28 At this day in open court comes again the said plaintiff by his attorneys, Johnson & Smith and T. C. Early, Esqrs., and the defendants by their attorneys, C. S. Thomas and S. P. Dale, Esqrs., also come. And thereupon come again the said jurors and on their oaths say:

"JOSEPH H. BEALS
vs.
"JAMES J. CONE ET AL. } No. 4086.

"We the jury find the issues joined herein for the defendants and we further find that they have established their title and right to, and are entitled to the possession and occupancy of the premises in controversy, by reason of a full compliance with the acts of Congress and the laws of the State of Colorado relati g thereto.

"D. L. CELL, *Foreman.*"

To which verdict the plaintiff duly excepts. And time and until five days from this day is allowed said plaintiff in which to file a motion to set aside the verdict of the jury herein, and for a new trial in this behalf.

And thereupon and on to wit: the 18th day of February A. D. 1898 there was filed in the office of the clerk of said court the jury list which is in words and figures as follows, to wit:

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

28½ JOSEPH H. BEALS *vs.* JAMES J. CONE ET AL. } Case No. 4086.

Each party is entitled to excuse four (4) jurors, and will indicate which ones are excused by striking out the name and placing in the blank space at the right (for plaintiff and defendant) the number designating the order in which they are excused.

Names of jurors.	Excused by plaintiff.	Excused by defendant.
1. [W. C Finley]*	.....	No. 1.
2. E. W. Hull	.....	.....
3. Pat Donnelly	.....	.....
4. W. A. Moody	.....	.....
5. F. A. Mangold	.....	.....
6. [J. C. Brinkerhoff]*	.....	No. 4
7. [Andrew Mulloy]*	.....	No. 2
8. W. Pring	.....	.....
9. James Catron	.....	.....
10. H. S. Poley	.....	.....
11. J. S. Arthur	.....	.....
12. [A. Croe]*	No. 1	.....
13. Paul Dingle	.....	.....
14. D. L. Cell	.....	.....
15. [D. F. Burson]*	.....	No. 3
16. J. E. Shobe	.....	.....
17. [C. F. Ormsby]*	No. 3	.....
18. [Joe McCoombs]*	No. 4	.....
19. Geo. Harbaugh	.....	.....
20. [J. C. Armstrong]*	No. 2	.....

[* Names enclosed in brackets erased in copy.]

EDGAR HOWBERT, *Clerk,*
By C. R. MANNING, *Deputy.*

Endorsed: No. 4086. In the district court, El Paso county. Jury list. Joseph H. Beals, plaintiff, *vs.* James J. Cone *et al.*, defendants. Filed in the district court of El Paso county, Colorado, Feb. 18 1898. Edgar Howbert, clerk, by C. R. Manning, deputy.

29 And thereafter and on to wit: the 21st day of February, A. D. 1898, the same being one of the days of the regular January A. D. 1898 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } Adverse.

At this day in open court comes the said plaintiff by his attorney Ralph W. Smith, Esq., and the defendants by their attorney C. S. Thomas, Esq., also come.

Thereupon upon motion of said plaintiff, the defendant consenting thereto, it is ordered by the court that time, and until fifteen days from this day be allowed said plaintiff in which to file affidavits in support of a motion for a new trial herein, and that further time and until ten days thereafter be allowed said defendants in which to file affidavits in answer, as they may be advised.

And thereafter and on to wit: the 3rd day of March, A. D. 1898, the same being one of the days of the regular January A. D. 1898 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants.

30 At this day in open court comes the said plaintiff by his attorneys, Johnson & Smith, Esqrs., and the said defendants by their attorneys, Thomas, Bryant & Lee, Esqrs., also come. Thereupon this cause coming on to be heard upon the motion of said plaintiff for an order allowing him to bring witnesses before the court, to testify in support of his said motion for a new trial, is argued by counsel and the court being now sufficiently advised in the premises, doth grant said motion, and it is ordered by the court that the said plaintiff shall set out the names of such witnesses and serve a copy of the same on the defendants within five days from this day.

And thereafter and on to wit: the 3rd day of March A. D. 1898, there was filed in the office of the clerk of said court the motion which is in words and figures as follows, to wit:

STATE OF COLORADO, }
County of El Paso, } *ss:*

In the District Court of said County.

JOSEPH H. BEALS, Plaintiff, }
vs. } No. 4086. Motion.
J. J. CONE ET AL., Defendants. }

Now comes the plaintiff in the above-entitled cause and moves the court to enter an order allowing plaintiff the process of this court to bring witnesses before the court to give their testimony or affidavits in support of the motion for a new trial now on file in
31 said cause, and to fix a time when the taking of *of* such testimony or affidavits shall begin, and in support of such motion, assigns the following reasons:

First. That many of the witnesses whose testimony is sought in support of said motion are refractory and unwilling witnesses.

Second. That some of said witnesses, while willing to testify, are not willing to make a voluntary affidavit.

Third. That the testimony sought is material and relevant to the issues made by said motion.

Fourth. That it would tend to defeat the ends of justice to give the names of said witnesses in advance of their examination or the principal facts to which they will testify.

JOHNSON & SMITH,
Attorneys for Plaintiff.

Endorsed: No. 4086. J. H. Beals *vs.* J. J. Cone *et al.* Motion to examine witnesses. Filed in the district court of El Paso county, Colorado, Mar. 3, 1898. Edgar Howbert, clerk, by E. C. Davis, deputy.

And thereafter and on to wit: the 17th day of March A. D. 1898, the same being one of the days of the regular January A. D. 1898 term of said court the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff, }
vs. }
JAMES J. CONE ET AL., Defendants. }

32 At this day in open court upon the motion of said defendants, it is ordered by the court that the time in which said defendants may file affidavits in reply to affidavits of said plaintiff in support of his motion for a new trial herein, may be and the same is hereby extended for ten days.

And thereafter and on to wit: the 19th day of March, A. D. 1898, the same being one of the days of the regular January A. D. 1898 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants.

At this day in open court come the said defendants by their attorneys Thomas, Bryant & Lee, Esqrs. Thereupon this cause coming on to be heard upon the motion of said defendants for an order of court "requiring the plaintiff to give security for costs and for the payment of legal and necessary expenses resulting on the hearing of the motion for a new trial" herein is argued by counsel and the court being now sufficiently advised in the premises, doth deny said motion. And it is further ordered by the court that the hearing of the motion for a new trial of this cause be and is hereby set for April 4th, 1898.

33 And thereafter and on to wit: the 4th day of April, A. D. 1898, the same being one of the regular days of the January A. D. 1898 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants.

At this day in open court comes said plaintiff by his attorneys, Johnson & Smith, Esqrs., and the defendants by their attorneys, Thomas, Bryant & Lee, Esqrs., also come. Thereupon this cause coming on to be heard upon the motion of said plaintiff to set aside the verdict of the jury heretofore rendered herein, and for a new trial of this cause; oral testimony and arguments of counsel are heard; the matter is submitted to the court, and is by the court taken under advisement.

And thereafter and on to wit: the 20th day of April, A. D. 1898, the same being one of the days of the regular January A. D. 1898 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
J. J. CONE ET AL., Defendants.

This cause having heretofore been submitted to the court upon the motion of said plaintiff, to set aside the verdict of the jury and for a new trial of this cause, and by the court taken under
34 advisement, and the court being now sufficiently advised in the premises, doth deny said motion. To which ruling of the court said plaintiff duly excepts. And it is ordered by the court that judgment be entered in accordance with the verdict of the jury heretofore rendered, and let the same be recorded in the judgment book.

Which said judgment is in words and figures as follows, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants.

The court having this day ordered that judgment be entered herein in accordance with the verdict of the jury herein. Now, therefore,

It is considered by the court that the defendants do have and recover of and from the plaintiff all the premises in controversy between the Tecumseh Lode mining claim and the Ophir Lode mining claim, situate in the Cripple Creek mining district, El Paso county, State of Colorado, described as follows, to wit:

Beginning at cor. No. 3 Tecumseh lode, thence N. 60° 38′ W. 250.17 ft. to corner No. 3 Ophir lode; thence N. 29° 22′ E. 1,357.79 ft. to cor. No. 4 Ophir lode; thence S. 60° 38′ E. 300 ft. to cor. No. 1 Ophir lode; thence S. 29° 22′ W. 8.60 ft. to intersecting lines 1–2 Ophir lode and 1–2 Tecumseh lode; thence S. 35° 56′ W. 699.16 ft. to cor. No. 2 Tecumseh lode; thence S. 26° 40′ W. 655.34
35 ft. to place of beginning by reason of a full compliance with the acts of Congress and the laws of the State of Colorado relating thereto, and do have and recover of and from the plaintiff their costs in this behalf laid out and expended, to be taxed, and have execution therefor.

And thereupon and on to wit: the 20th day of April, A. D. 1898, the same being one of the days of the regular January A. D. 1898 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants.

At this day in open court comes the said plaintiff, by his attorneys, Johnson & Smith, Esqrs., and prays an appeal to the supreme court of the State of Colorado, which is allowed upon condition that he file herein within sixty days from this day his appeal bond in the penal sum of five hundred dollars, with sureties to be approved by the clerk of this court.

And time and until ninety days from this day is allowed said plaintiff, within which to prepare and tender to Honorable Ira Harris, Esq., one of the judges of this court, his bill of exceptions which, when signed, and sealed by said judge shall be filed herein as of this day.

36 And thereafter and on to wit: the 26th day of April, A. D. 1898, there was filed in the office of the clerk of said court the appeal bond, which is in words and figures as follows, to wit:

Know all men by these presents, that we, Joseph H. Beals, as principal, and David H. Moffatt and Ralph Smith, as sureties of

the county of Arapahoe and State of Colorado, are held and firmly bound unto J. J. Cone and Lyman Robison in the penal sum of five hundred dollars, for the payment of which, well and truly to be made, we and each of us bind ourselves, our heirs, executors and administrators, jointly and severally, firmly by these presents.

Sealed with our seals and dated at Denver Colo., this — day of April in the year of our Lord one thousand eight hundred and ninety-eight.

The condition of the above obligation is such, that whereas, the said J. J. Cone and Lyman Robison did, on the 20th day of April one thousand eight hundred and 98, at a term of the district court then being holden within and for the fourth judicial district in the county of El Paso and State of Colorado, obtain a judgment and decree against the above-bounden Joseph H. Beals for the property described in plaintiff's complaint, in cause No. 4086 between parties hereto and costs of suit, from which judgment and decree the said Joseph H. Beals has prayed for and obtained an appeal to the supreme court of said State of Colorado.

Now if the said Joseph H. Beals shall duly prosecute said appeal, and shall moreover pay the amount of the said costs, interests and damages, rendered and to be rendered against him, the said
37 Joseph H. Beals, in case the said judgment and decree shall be affirmed in the said supreme court, then the above obligation to be null and void, otherwise to remain in full force and virtue.

JOSEPH H. BEALS. [SEAL.]
DAVID H. MOFFATT. [SEAL.]
RALPH W. SMITH. [SEAL.]

STATE OF COLORADO, } ss:
Arapahoe County, }

Personally appeared this day before me D. H. Moffatt, of Arapahoe county, of the county and State aforesaid, one of the securities on the bond of Joseph H. Beals who, being duly sworn, deposes and says: That he is seized and possessed in his own right, over and above all his just debts and liabilities, in property not exempt by law from levy and sale under execution, of a clear, unincumbered estate of the value of five hundred dollars, within the jurisdiction of this State.

D. H. MOFFATT.

Subscribed and sworn to before me, this 25 day of April, A. D. 1898. My commission expires June 7th, 1899.

[SEAL.] C. J. HAUGHWOUT,
Notary Public.

STATE OF COLORADO, } ss:
El Paso County, }

Personally appeared this day before me, Edgar Howbert, clerk of district court of El Paso county, Ralph W. Smith, of
38 the county and State aforesaid, one of the securities on the bond of Joseph H. Beals who, being duly sworn, deposes and

says, that he is seized and possessed in his own right, over and above all his just debts and liabilities, in property not exampt by law from levy and sale under execution, of a clear, unincumbered estate of the value of five hundred dollars within the jurisdiction of this State.

RALPH W. SMITH.

Subscribed and sworn to before me this 26th day of April, A. D. 1898.

EDGAR HOWBERT, *Clerk*,
[SEAL.] By E. C. DAVIS, *Deputy*.

Endorsed: Permission given Ralph W. Smith to sign within bond as surety. Ira Harris, judge. No. 4086. Appeal bond. District court of El Paso Co. Joseph H. Beals *vs.* J. J. Cone *et al.* Approved and filed in the district court of El Paso county, Colorado, Apr. 26 1898. Edgar Howbert, clerk, by E. C. Davis, deputy. Johnson & Smith, att'ys for pl't'ff.

39 I, Edgar Howbert, clerk of the district court of the fourth judicial district of the State of Colorado, within and for El Paso county, do hereby certify the above and foregoing to be a true, perfect and complete copy of the complaint, answer, replication, amended replication, demurrer, motions, jury list, appeal bond, and all orders had and entered of record in a certain cause lately pending in said court on the civil side thereof, wherein Joseph H. Beals was plaintiff, and J. J. Cone *et al.* were defendants, as the same appear on file and of record in this office, remaining; together with the original bill of exceptions, filed herein, hereto attached and marked Exhibit "A."

In witness whereof I have hereunto set my hand and affixed the seal of said court, at Colorado Springs, this 15th day of
[SEAL.] June, A. D. 1898.

EDGAR HOWBERT, *Clerk*,
By E. C. DAVIS, *Deputy*.

Endorsed: Filed in supreme court Jun- 18, 1898. Horace G. Clark, clerk.

40 STATE OF COLORADO, } *ss*:
County of El Paso, }

In the District Court of the Fourth Judicial District of the State of Colorado, Sitting within and for the County of El Paso.

JOSEPH H. BEALS, Plaintiff,
vs.
JAMES J. CONE ET AL., Defendants. } No. 4086.

Plaintiff's Bill of Exceptions.

Be it remembered that on the trial of this cause before the Honorable Ira Harris, one of the judges of the district court of the

fourth judicial district of the State of Colorado, at the January term of said court, on to wit: the 9th day of February, A. D. 1898, a jury having been duly selected, empanelled and sworn to try the same, the plaintiff, to sustain the issues herein in his behalf, gave in evidence as follows:

41 Thereupon the defendant demanded a jury of twelve, which was so drawn, empanelled and sworn.

42 JOSEPH H. BEALS, being first duly sworn on behalf of the plaintiff, testified as follows:

By Gen. JOHNSON:

Q. What is your name?
A. Joseph H. Beals.
Q. Where do you reside?
A. In Denver.
Q. Where were you born?
A. Springfield, Massachusetts.
Q. Where have you lived since your birth?
A. In Massachusetts and Colorado, principally.
Q. Are you a citizen of the United States?
A. I am.
Q. Are you acquainted with Joseph Beals, who was one of the original locators of the Tecumseh lode?
A. He is my father.
Q. Was he a citizen of the United States?
A. He was.
Q. Is this your signature?
A. Yes sir.
Q. Were you one of the original locators of the Tecumseh lode?
A. Yes sir.
Q. Who were the others?
A. Joseph Beals and D. J. Bridge.

Plaintiff then offered in evidence "Exhibit A" and "Exhibit B," the same being in the words and figures as follows:

Defendants' objection to the introduction of said exhibits being reserved.

43 STATE OF COLORADO, } ss:
County of El Paso, }

Know all men by these presents, that Joseph H. Beals, the undersigned, has, this 20th day of April, 1894, located and claimed, and by these presents does locate and claim, by right of discovery and location in compliance with the mining acts of Congress, approved May 10, 1872, and all subsequent acts, and with local customs, laws and regulations, 1,363.15 linear feet and horizontal measurement on the Tecumseh lode, vein, ledge, or deposit, along the vein thereof, with all its dips, angles and variations, as allowed by law, together with 150 feet on each side of the middle of said vein at the surface, so far as can be determined from present developments; and all

veins, lodes, ledges or deposits of surface grounds within the lines of said claim 702.67 feet running N. 35° 55′ 30″ E. from center of discovery shaft, and 660.48 feet running S. 26° 39′ 30″ W. from center of discovery shaft, said discovery shaft being situate upon said lode vein, ledge, or deposit, and within the lines of said claim, in Cripple Creek mining district, county of El Paso, and State of Colorado, described by meet-s and bounds as follows, to wit:

Beginning at corner No. 1, being the N. E. cor., a stone, whence cor. No. 1 sur. No. 7644, Ophir lode bears N. 60° 38′ W., 1.07 ft. Mt. Pisgah bears N. 58° 20′ W. Thence S. 35° 55′ 30″ W. 707.76 ft. to the east angle cor. No. 2, a stone, whence Mt. Pisgah bears N. 58° 39′ W.; thence S. 26° 39′ 30″ W., 655.34 ft. to the S. E. cor. No. 3, a stone, thence N. 60° 38′ W., 265.08 to witness corner to the S. W. cor. No. 4, whence Squaw Mt. bears S. 49° 57′ E. nor. No. 3 sur. No. 7644 Ophir lode bears S. 60° 38′ E., 14.91 ft.
44 300.34 ft. to the S. W. cor. No. 4, on the road-bed of the Florence & Cripple Creek R'y, thence N. 26° 39′ 30″ E., 665.63 ft. to the west angle cor. No. 5, a stone; thence N. 35° 55′ 30″ E., 697.58 — to the N. W. cor. No. 6, a stone, whence cor. No. 4, sur. No. 7644 Ophir lode bears S. 60° 38′ E., 1.07 ft. Thence S. 60° 38′ E., 301.98 ft. to the N. E. cor. No. 1, the place of beginning; said lode containing 9.388 acres, is situated on the N. W. slope of Raven Mt., about ½ mile S. E. of the town of Anaconda, in the N. W. ¼ sec. 30 T. 15 W. R. 69 W., the 6th P. M. Magnetic variation 13° 30′ east.

JOSEPH H. BEALS. [SEAL.]

Said lode was discovered & located on the 20th day of April, A. D. 1894.

Attest: C. H. MACNUTT.

Date of certificate June 18th, A. D. 1894.

Endorsed: Location certificate on the Tecumseh Lode mining claim of —— —— in Cripple Creek mining district, El Paso county, State of Colo.

STATE OF COLORADO, } ss:
County of El Paso, }

I hereby cereby certify that this location certificate was filed for record in my office at 10.45 o'clock a. m. June 21, 1894, and is duly recorded in Book 10 at page 118.

F. W. HOWBERT, *Recorder.*

Fees, 75c. p'd.

45 Copy.

STATE OF COLORADO, } ss:
County of El Paso, }

Know all men by these presents, that D. J. Bridge, J. H. Beals and Joseph Beals, the undersigned, have this third day of May, 1892, located and claimed, and by these presents do locate and claim, by

right of discovery and location, in compliance with the mining acts of Congress, approved May 10, 1872, and all subsequent acts, and with local customs, laws and regulations, fifteen hundred (1,500) linear feet and horizontal measurement on the Tecumseh lode, vein, ledge or deposit, along the vein thereof, with all its dips, angles and variations, as allowed by law, together with one hundred & fifty feet on each side of the middle of said vein, at the surface, so far as can be determined from present developments; and all veins, lodes, ledges or deposits and surface ground, within the lines of said claim 1,300 feet running N. 28° E. from center of discovery shaft, and 200 feet running S. 28° W. from center of discovery shaft; said discovery shaft being situate upon said lode, vein, ledge or deposit, and within the lines of said claim, in Cripple Creek mining district, county of El Paso and State of Colorado, described by metes and bounds as follows, to wit:

Beginning at corner No. 1 (N. E. cor.) whence quarter corner between sections 19 and 30, township 15 south range 69 west of 6th principal meridian bears S. 3° 37′ W. seven hundred and seventy feet, thence S. 28° W. seven hundred and fifty feet to southeast side center post and same course continued seven hundred and fifty feet to corner No. 2, whence Little Grouse mountain bears S. 20°
46 50′ W. and Bald mountain (south of Squaw gulch) bears N. 83° 30′ W., thence N. 62° W. three hundred feet to corner No. 3, thence N. 28° E. seven hundred and fifty feet to northwest side center post and same course continued seven hundred and fifty feet to corner No. 4, and thence S. 62° E. three hundred feet to the beginning, all courses; true magnetic variation, 14° 30′ east.

D. J. BRIDGE. [SEAL.]
J. H. BEALS. [SEAL.]
JOSEPH BEALS. [SEAL.]

Said lode was discovered on the 18th day of April A. D. 1892.

Attest: C. T. DEUEL.

Date of location, May 3, A. D. 1892.
Date of certificate, May 3, A. D. 1892.

[SEAL.]

Endorsed: Location certificate on the Tecumseh mining claim of —— —— in —— mining district, —— county, State of Colorado.

STATE OF COLORADO, } ss:
County of El Paso, }

I hereby certify that this location certificate was filed for record in my office at 11.10 o'clock A. D. May 6, 1892, and is duly recorded in Book 3, at page 263.

F. W. HOWBERT, *Recorder.*

47 STATE OF COLORADO, } ss:
County of El Paso, }

I, J. W. Bates, county clerk and recorder in and for the county and State aforesaid, do hereby certify that the within and foregoing is a full, true and correct copy of location certificate of the Tecumseh lode, filed for record at 11.10 a. m. May 6, 1892, and was duly recorded in Loc. Cert. Record 3 at page 263 of the El Paso Co. Colo. records, made from the original record.

In testimony whereof, I have hereunto set my hand and affixed my official seal, at my office in Colorado Springs, in said county and State, this 29th day of May, A. D. 1897.

[SEAL.]

J. W. BATES,
County Clerk and Recorder,
By CHAS. E. LEIBOLD, *Deputy.*

48 Cross-examined by Mr. THOMAS:

Q. You are the plaintiff, I believe, in this case?
A. Yes sir.
Q. And the sole plaintiff of record?
A. Yes sir.
Q. Mr. Joseph Beals, your father, is not living, I believe?
A. No sir, not at present.
Q. And Mr. Bridge—is he still interested in the property?
A. Yes sir.
Q. The title having been put in your name for convenience?
A. Yes sir.

D. J. BRIDGE, being first duly sworn on the part of the plaintiff, testified as follows:

Q. What is your name?
A. D. J. Bridge.
Q. Where do you reside?
A. Denver.
Q. How long have you lived in Colorado?
A. Since 1879.
Q. What has been your business?
A. I have been in the mining business.
Q. How long have you been mining?
A. Since 1875, more or less, in different localities.
Q. Are you the D. J. Bridge who was one of the locators of the Tecumseh claim?
A. I suppose I am.
Q. What did you do by way of locating that claim?
A. I located it, if my recollection serves me rightly, on the 18th day of April, in 1892.
Q. How did you locate it?
A. By putting up a stake with a notice upon it, and afterwards doing the necessary assessment-work and further development.
49 Q. What kind of a notice did you put up?
A. The usual form; I can't recollect the wording of it; it

was a board nailed upon a stake, and the stake stuck in the ground right at the place where I sunk the assessment shaft or open cut.

Q. What, substantially, did that notice contain?

A. It contained the date and the direction, as near as I could get at it, and the names of the parties locating.

Q. Did you give the lode any name?

A. Yes, sir.

Q. What name?

A. Tecumseh.

Q. That was on the 20th day of April, 1892?

A. The 18th, I think it was, of April, 1892.

Q. What did you do by way of sinking the shaft?

A. I went right ahead and sunk the assessment-work; it was an open cut that I made until I got where I could get the dirt out; I was working alone at that time and I ran the open cut so that I could get the dirt out; it was too deep, measuring ten feet from the bottom, so I made the open cut that I could take it out on the open cut.

Q. To what depth did you sink?

A. About 13 feet.

Q. That same spring?

A. No, after I got so that I could throw it out then I went down and threw it back into this open cut.

Q. When did you do this sinking?

A. It was immediately after the location on the 18th of April, 1892.

Q. By what time?

A. I think within the same week or near that time.

Q. You may state whether or not you continued work there until you had sunk to this depth of 13 feet?

A. I did.

Q. Without any stopping?

A. Yes, sir.

Q. When, if at any time after that, was there any more
50 work done on that shaft?

A. I can't give the date of that, but after that we let a contract, if I recollect rightly, of thirty feet additional and it was sunk thirty feet additional in depth.

Q. Making forty-three feet?

A. About forty-three feet.

Q. Was that done in 1892?

A. I think it, yes; I think it was done during the summer of 1892, probably in June or July.

Q. Did you discover in that shaft any mineral vein?

A. We discovered an open crevice that I could run my foot and leg down to my knees, just as far as I could get down, and we also got small assays, but we did not reckon on a discovery of mineral.

Q. You didn't think it was sufficient?

A. No sir.

Q. To make a valid discovery?

A. No sir, we didn't think it was sufficient to be called, in miners' parlance, a vein.

Q. That would be this shaft that is marked the old shaft here on this map, wouldn't it?

A. I suppose it would; I can't see very distinctly from here.

Q. Did you discover there, when you were doing this work, that any one else was prospecting around there?

A. We discovered a small shaft a little northeast of where he had been working.

Q. Do you remember the name of it?

A. It was called The Ophir, I believe, according to the notice.

Q. What was the depth of that shaft?

A. It was about eight feet and a half to the deepest point; it was sloped in from the sides, from all directions, apparently; and it was about eight and a half at the deepest part of it.

Q. How often did you examine it?

A. I can't tell; probably twenty times, at different times.

Q. Was that down to solid formation?

A. No sir, no more so than the whole hill is there, it is all broken up.

51 Q. Was there any vein discovered in that shaft when you saw it?

A. I couldn't see any at all.

Q. Had that shaft been sunk any deeper up to the time you sunk your shaft to the depth of forty-three feet?

A. No sir.

Q. When, if at any other time later than that, did you examine this Ophir shaft?

A. I can't tell you; I think it must have been in 1893; we had examined it several times and different parties with me, some of whom are now dead, and others moved away and are gone; but I think in 1893 and somewhere along I think probably July or August I and a gentleman by the name of Hoenshell examined it again.

Q. For what purpose did you make that examination?

A. To find the extent of the work that had been done in it after we quit there.

Q. And also to ascertain whether there was any discovery?

A. Yes sir; I was wanting to see if they had discovered anything

Q. You may state whether or not you made that examination for the purpose of testifying before the land office at Pueblo?

A. I did.

Q. You remember the date of that hearing?

A. I can't give the date.

Q. If that was on the 11th of October, 1893, how long before. that?

A. I think it was about a week before that—a very few days.

Q. Did you go up there and examine the property and go direct from there to Pueblo? Or did you go back home?

A. I think we went back home; I am not real definite about that.

Q. At all events the examination was made shortly prior to that hearing?

A. A very short time previous.

Q. And for the purpose of testifying upon that hearing?

A. Yes sir.

52 Q. What was the depth of the shaft at that time?

A. About 25 feet.

Q. Did you measure it?

A. Yes sir.

Q. Did you measure it carefully?

A. Yes sir, I think so; I had a tapeline.

Q. Did you find any vein in that shaft at that time?

A. No.

Q. Was there any there?

A. None there that we discovered.

Q. Did you find any symptom or indication of a mineral vein in that shaft?

A. No sir.

Q. What, if any other work did you do upon the Tecumseh lode by way of sinking any other shafts or making any other trenches or anything of that kind?

A. We didn't sink any other shaft on the Tecumseh; we did on a couple of other claims that were lying side by side with them.

Q. Did you know, up to 1893, of any other work that the Ophir people had ever done on their claim other than the sinking of that twenty-five-foot shaft?

A. No sir.

Q. Were you sufficiently familiar with the ground to know whether if they had sunk other shafts or done other work you would have discovered it?

A. I think so.

Q. You spoke of putting up the stakes and everything an ordinary miner would put up; you may state a little more specifically what you did put up in making this location?

A. I put up a stake, I think it was about five feet high above the ground, with a board about three or four inches wide and probably about eight or ten inches long; and on that I wrote the notice of location, the date and the names of the parties and the name of the lode, giving notice of the location.

Q. What other stakes, if any, did you put up? Corner stakes or posts?

A. Afterwards, after we did the assessment-work, we sur-

53 veyed and put up the corner stakes and intermediate stakes.

Q. What was placed on those stakes?

A. The number of the corner and the name of the corner and the number and so on, facing outwards from the claim.

Q. Were those stakes hewed on the inside?

A. I don't mind they were on the outside, especially the corners.

Q. Were those stakes numbered?

A. I believe they were numbered.

Q. Where were the intermediate stakes placed?

A. Midway, between the extreme corners.
Q. On the sides?
A. Yes sir, on the sides.
Q. Was the name of the lode on all those stakes?
A. That I can't tell you whether it was or not; I don't know but it was designated by initials or something of that kind.
Q. You subsequently, if I understand you, surveyed the claim and located it?
A. Yes sir.
Q. And filed a location certificate?
A. Yes sir.
Q. Is this, according to your best judgment, a copy of the location certificate that you filed? (Referring to Exhibit B.)
A. I should judge it was.
Q. You filed but one certificate giving the name "The Tecumseh lode," did you?
A. That is the only one.
Q. At that time?
A. Yes sir. The only one.

Cross-examined by Mr. THOMAS:

Q. You are still an owner of the Tecumseh, are you not?
A. I am interested in it.
Q. You have been interested as an owner ever since its location?
A. Yes sir.
Q. You think it was on the 18th of April, or thereabouts, of 1892 that you began work on the claim?
A. It was very soon after that, maybe the next day.
54 Q. About that time?
A. Yes sir, it was near that time, if my memory serves me right.
Q. You say you sunk the shaft thirteen feet deep without assistance from any one; you did it all yourself?
A. I ain't sure whether I finished it entirely; the other man, Mr. Hoenshell, I think got there a day or two before I finished it, and I think, if my recollection is right, that he helped me a little towards the last.
Q. Is that the man who sunk the remaining thirty feet for you?
A. No, sir.
Q. Who was that man?
A. A man by the name of Combs.
Q. That was done in the spring of 1892, was it, in the late spring?
A. No, I think it was along in the summer that additional thirty feet was sunk.
Q. Was the claim staked before the thirty feet of work was done or after? Were stakes put around the claim before the thirty feet of work was done or afterwards?
A. I think it was done after the stakes; that is my recollection.
Q. Were those stakes set so that the hole that you sunk and called the discovery shaft was in the center of the claim?

A. No sir, it was near one end.

Q. Was it midway of the side lines?

A. Yes sir; I think it was some distance from the side lines.

Q. You took a hundred and fifty feet on each side from that shaft did you?

A. I ain't right sure whether we took a hundred and fifty feet on each side of it or whether there was the major part of it on one side; I can't just recollect how that was located now.

Q. Was there an elbow in the claim?

A. No sir.

Q. Not as originally located?

A. No sir, not as originally located.

55 Q. How did it run—north and south or east and west?

A. No, it ran northeast or in that direction; it seems to me it was about twenty degrees east of north.

Q. How did you come to throw the claim in that direction?

A. It was our opinion that that is the direction that the mineral ran.

Q. You state that you had no vein?

A. There was nothing; we didn't have any on the surface.

Q. Did you have any in the shaft?

A. It was our impression, I told you, that it ran in that direction.

Q. That is, if there was any mineral in that claim it ran in that direction; it was your impression that if there was any mineral in the claim that it ran in that direction; is that it?

A. Yes sir.

Q. How far was the shaft which you sunk in 1892 from the south end line of the claim, as you located it?

A. I think it was probably from fifty to seventy-five feet.

Q. And it ran north from that point about 1,425 or 1,450 feet?

A. Yes sir, northeasterly.

Q. So that the great bulk of the claim was uphill?

A. Yes sir.

Q. And that was the lode, was it, that you claimed at the time that you filed your protest in the land office against the Ophir?

A. Let me understand what you mean.

Q. I say, it was that location that you claimed or owned at the time you filed your protest in the land office against the patent of the Ophir?

A. I think so; but at the time that protest was filed I didn't know the shape and condition that the claim was in at that particular time.

Q. Did you have anything to do with the location or the sinking of what is now the discovery shaft of the Tecumseh?

—. ——.

56 *A.* Did you have anything to do with the sinking or working on what is now called the discovery shaft of the Tecumseh?

A. I guess not.

Q. That is an entirely different discovery from the one that you have been talking about, is it?

A. I think so.

Q. I believe that you say that that hole that you started and that Combs finished had no vein in it?

A. We didn't claim any.

Q. Did it have any in it?

A. I spoke about a crevice, the open crevice.

Q. I understand that; you went and put your leg in it?

A. That is all that would indicate that there was liable to be a vein there.

Q. That was an opening that had no filling of any kind?

A. No, it was an open crevice.

Q. At what part of the shaft did that appear?

A. Mainly to one side of the middle of the shaft, a little to one side.

Q. How far from the bottom?

A. It was nearer the middle.

Q. But how far from the bottom of the shaft?

A. It was right in the bottom.

Q. At forty-three or thirteen feet?

A. No, this was before we reached the forty-three-feet depth; it was in the 13-foot work.

Q. And the balance of it, or the balance of the shaft, showed this crevice going down?

A. That I don't know; we was at work on other property while this development work was going on, so that I don't know what did become of that crevice.

Q. You say that when you first saw what is called the Ophir shaft it was about eight and a half feet deep?

A. Yes sir.

Q. Was that through the wash?

A. Not what I call through the wash.

Q. What do you call through the wash?

57 A. I call that wash which has been moved from time to time without any stratification, lying on the surface, as it does, all over those hills most everywhere.

Q. Would you call picking ground in place what miners call picking ground, in place?

A. No sir.

Q. Anything that you can pick, then, in your judgment is wash?

A. Yes sir.

Q. And it requires blasting to remove what you call rock in place?

A. Yes sir.

Q. Is that your definition?

A. Yes sir.

Q. You saw no evidences of blasting in this eight and a half foot hole?

A. No sir.

Q. When did you next measure that shaft? I don't mean see it but actually measure it?

A. Just a few days before this investigation was held at Pueblo.

Q. And you think then that it was 25 feet deep?

A. Yes sir, that was about the depth of it.
Q. How deep did you put it at the last trial of this case?
A. Twenty-five.
Q. Are you sure?
A. That is my recollection of it.
Q. Twenty-five feet, even?
A. Well, in the neighborhood; a very few inches of that.
Q. Didn't you say it was twenty-four feet eight inches?
A. It might have been; it was very uncertain with regard to the precise depth, but we allowed that it had been intended for twenty-five feet.
Q. You measured it with a tapeline at the time?
A. I know, but then there is soil dropping from the wall
58 that would modify it probably a little.
Q. But your purpose in measuring it was to get it as accurate as possible for the purpose of testifying at Pueblo, wasn't it?
A. Yes sir.
Q. And Mr. Hoenshell helped you measure it?
A. Yes sir.
Q. Didn't that measurement show that it was twenty-four feet and ten inches?
A. I think that was probably about the case.
Q. Let me read your testimony and see if you recognize it,—at the other trial:
"Did you intend to do it accurately? A. Yes sir. Q. What depth did you find that shaft? A. We found it, at the deepest place, twenty-four feet and eight inches; there was a little scattering around the bottom that was not quite as deep as that. Q. Did you say eight or ten inches? A. I don't know but that it was 24 feet ten inches; yes, it was. Q. How did you measure it at that time? A. We measured it with a tapeline."
Is that correct?
A. I think that is about it; I couldn't recollect exactly.
Q. So that you found it twenty-four feet ten inches?
A. Yes sir.
Q. What was the material in which that shaft seemed to you to have been sunk; in what sort of rock did that shaft seem to have been sunk that depth?
A. It seemed loose formation.
Q. All the way down?
A. All the way down; there was no stratified rock.
Q. Did you consider that it was in wash or picking ground for twenty-four feet and ten inches?
A. I did consider it in just that form.
Q. How deep is the wash on that hill?
A. It is hard to tell; we found that it was mainly so, the whole depth of forty-three feet on our shaft.
Q. So that that crevice that you found down at the other
59 shaft at the thirteen-foot point that you could stick your leg in, was merely a crack in the wash?
A. Probably.

Q. So that that shaft that you sunk forty-three feet deep you say was in the wash, you think, from top to bottom; did I understand you to say that the wash where you sunk this forty-three-foot shaft was as deep as the shaft?

A. Nearly so; it is not what I would call stratified rock at all or rock in place.

Q. Porphyry rock up there is not stratified at all, is it.

A. No, there is many places you don't find it stratified.

Q. But in your judgment that shaft when it was twenty-four feet and ten inches deep was all in wash and your shaft was nearly all in wash?

A. Yes sir, mostly.

Q. About how much of that forty-three feet do you think was not in wash?

A. There might have been ten feet of the bottom.

Q. So that about thirty-three feet of it was wash?

A. Yes sir.

Q. What is your estimate of the depth of the wash on that mountain from your experience on that part of it?

A. We didn't get deep enough to make an estimate.

Q. You saw no evidence of blasting, did you, in that twenty-four foot, ten inch shaft?

A. Yes sir, we had to blast.

Q. I am talking about the Ophir shaft, twenty-four feet, ten inches.

A. No, I saw none at that time.

Q. You saw no vein in there.

A. No sir.

Q. What do you call a vein?

A. There is different kinds of veins as I understand it.

Q. Can you give us a general definition of a vein?

A. One kind of a vein is a fissure vein, as near as I can describe it, and it is a fissure or crack or opening in granite.

Q. In granite?

A. Granite both sides.

60 Q. Your understanding of a fissure vein is that it is a crack or opening and its walls must be granite?

A. Yes sir.

Q. This shaft not being in granite, then, the Ophir shaft, of course you saw no fissure vein in it?

A. No sir, no fissure vein.

Q. What other kinds of veins do you know of?

A. There is what they call a contact vein where it may be on one side granite and on the other another formation of rock—porphyry or something else.

Q. Are there any other sorts of veins that you know of?

A. Then there is a blanket vein laying nearly flat.

Q. Any other sort?

A. There is other forms of mineral deposits.

Q. What do you understand by a mineral deposit?

A. It is a body of mineral-bearing rock without any reference to walls.

Q. Is it in place, your conception of a deposit?
A. It may possibly be in place, but more likely not.
Q. If it is in place, it is locatable, is it not, as a lode claim?
A. Certainly.
Q. Now is your definition of a vein one which makes it necessary that there should be two walls; is your idea of a vein one which requires the existence of two walls?
A. Yes sir, that is my idea of a true vein.
Q. And unless it has two it is not a vein?
A. No sir.
Q. Is it your idea, too, that these two walls must be visible—that you can see them?
A. Yes sir.
Q. And unless there is a visible separation, or a wall on each side of the mineral deposit, there is no vein, in your judgment?
A. No sir, I would not call it a vein.
Q. If you find in rock in place and without walls material
61 that would assay three or four or five or ten dollars in gold, you would not call that a vein?
A. No sir.
Q. What would you call it?
A. I would call it a deposit.
Q. And would locate it as such?
A. Yes sir.
Q. Did you help stake this Tecumseh claim that was located in 1892?
A. Yes sir.
Q. And you staked it, I believe you said, with one stake at each corner and one in the center of each side line?
A. Yes sir.
Q. Were those wooden stakes?
A. Yes sir.
Q. And hewed, you said, on the outside?
A. Yes sir; blazed on the outside.
Q. And marked on the outside?
A. Yes sir.
Q. The natural surface of the wood on the inside left in its natural condition?
A. If I recollect right, it was; I am not thoroughly clear in that particular.
Q. How were they marked?
A. I can't recollect just exactly how they were marked; the surveyor marked them, and just how they were marked I couldn't tell you that.
Q. At the time you examined the Ophir shaft and measured it with Mr. Hoenshell, did you go into the shaft?
A. Yes sir.
Q. Did you both go into it?
A. Yes sir.
Q. At the same time, or did you alternate?
A. We alternated.

Q. Did you take any ore out of it?
A. Yes sir.
Q. How much?
A. I couldn't tell you; probably a half dozen or a dozen pieces.
Q. And you were on top when that was taken out, weren't you?
A. Yes sir.
Q. How long were you there measuring it?
A. I couldn't say that at all; we satisfied ourselves in re-
62 gard to it and got what specimens we wanted for assay.
Q. What is your age?
A. Nearly sixty-five; I will be sixty-five on the 23rd of this month.

D. M. HOENSHELL, being first duly sworn on the part of the plaintiff, testified as follows:

Q. Where do you reside?
A. Cripple Creek.
Q. What is your business?
A. Mining.
Q. How long have you been mining?
A. About six years.
Q. Are you acquainted with the Tecumseh and the Ophir lodes?
A. Yes sir.
Q. Are you acquainted with Mr. Bridge who just testified?
A. Yes sir.
Q. Do you know anything about the original location of the Tecumseh in the spring of 1892?
A. Yes, I was there in the spring of 1892; I helped Mr. Bridge do a few days' work on the Tecumseh shaft.
Q. How was it located at that time?
A. If my recollection serves me right it was located in a northerly direction from the location shaft; northerly and southerly.
Q. Were you there when the location work was completed?
A. Yes sir.
Q. Did you help do it?
A. I helped finish the location work on there.
Q. You may state whether or not there was a discovery notice put up?
A. Yes sir.
Q. What did it contain?
A. It claimed 1,500 feet; I can't tell how much of that was
63 in a southerly direction, but there may possibly have been a hundred feet or maybe a little more or maybe not quite so much, and the rest was in a northerly direction but it claimed 1,500 feet in length and three hundred feet in width.
Q. What in regard to the name of the lode and locators etc.?
A. The name of the lode was called the Tecumseh, and the locators were J. H. Beals, Joseph Beals and D. J. Bridge.
Q. How about the date of location; was there a date on that?
A. Yes; I can't remember the date of location, but it had the date of the location.

Q. Were you there when that claim was surveyed and recorded?

A. Yes sir, I helped survey it.

Q. Do you remember the date of that?

A. No, sir.

Q. Do you remember how much work had been done at that time?

A. About 13 feet; that is the breast of it was about thirteen feet. It was an open cut and then sunk at the back part of the open cut —there was a shaft sunk down about three or four feet; the open cut, I think the breast of the open cut was about nine feet and then there was about four feet sunk there; that is, the breast measured at the breast thirteen feet or about thirteen feet.

Q. Would that be 13 feet from the lowest part of the rim, if it had been a shaft all of the way?

A. It might have been, possibly, a few feet less; it was on the slant of the hill, and the width of the shaft, three or four feet, could have made a few feet of difference, at the lowest part.

Q. Did you see that shaft after the other thirty feet of work had been done?

A. Yes sir.

Q. What was in it then?

A. I don't think there was anything in it.

Q. You don't think there was any vein disclosed in it?

A. No sir.

64 Q. You saw the shaft, however, after it had been sunk thirty feet?

A. Yes sir; if my memory serves me right I measured it at thirty feet; I went down to the bottom and saw it and measured the work.

Q. That thirty feet was sunk under a contract?

A. Yes sir; that is, I believe so; that was what I was told, that it was; that is all I know.

Q. Did you measure in the spring of 1892 this Ophir shaft?

A. Yes sir.

Q. How deep was that?

A. It was between eight and nine feet; it was not nine feet deep; it was over eight; it was between eight and nine, I think.

Q. Did you measure it?

A. Yes sir.

Q. Was there any symptom of a discovery there?

A. No sir.

Q. Any more than there was in the Tecumseh shaft?

A. No sir.

Q. When, if at any other time, did you go and make an examination of that Ophir shaft?

A. Some time in 1893.

Q. For what purpose was this done?

A. For the purpose of testifying before a suit that was then pending at Pueblo.

Q. On this protest that has been spoken of?

A. Yes sir.

Q. Did you and Mr. Bridge go there together and examine it?
A. Yes sir.
Q. And qualified yourself to speak as to the facts of the case?
A. Yes sir, that is what I went there for.
Q. Did you have any interest in that matter then?
A. None whatever; none at all.
Q. Have you any interest in the property now?
A. No sir, I never had any.
Q. What depth did you make that shaft?
65 A. Twenty-four feet ten inches.
Q. Did you measure it?
A. Yes sir.
Q. Did you try to measure it accurately?
A. We tried to measure it accurately, as we best could, yes.
Q. With a tapeline?
A. Yes sir.
Q. And with a view of testifying to the fact?
A. Yes sir.
Q. Was there at that time any sign of any mineral vein in that shaft?
A. No sir.
Q. Was there any crevice?
A. No sir.
Q. Of any kind?
A. No sir.
Q. Was there any discoloration or anything showing any impregnation of those walls at any point?
A. No sir.
Q. At that time?
A. No sir.
Q. If this hearing at Pueblo was on the 11th of October, about how long before that was it that this examination was made?
A. If the hearing was on the 11th, I think this about the 9th; I think it was two days before we went down there, or two days before the hearing.
Q. As a part of your examination of that shaft at that time, did you take mineral with a view of having it assayed?
A. I took rock out of the bottom of the shaft, yes; out of the bottom and sides of the shaft for the purpose, as Mr. Bridge said, of having it assayed.

Cross-examined by Mr. THOMAS:

Q. Mr. Hoenshell, how long have you been mining?
A. I have been mining, what we call mining, about six years.
Q. Whereabouts?
A. At Cripple Creek.
Q. What is the first mining you did there?
66 A. The first thing I did there, the first work I done, was done on the Tecumseh shaft, the first I done there.
Q. You worked there, you say, two days?

A. It was two or three days I worked on the Tecumseh.
Q. How deep was the Tecumseh shaft when you worked there?
A. It was, I suppose, about ten feet.
Q. Where did you work just before then?
A. That was the first work I done.
Q. You said that was the first work you did in Cripple Creek; where had you worked on mines before you went to Cripple Creek?
A. I never worked on any mines before I went there; I done some prospecting in Leadville before I went to Cripple Creek, a little.
Q. You did some prospecting in Leadville?
A. Yes sir.
Q. Did you go from Leadville to Cripple Creek?
A. No sir.
Q. Did your experience in mining before you went to Cripple Creek consist of prospecting at Leadville?
A. That is all.
Q. You never prospected anywhere else?
A. I prospected a little down below Buena Vista, in what they call Bassam Park.
Q. And that was between the time you left Leadville and the time that you went to Cripple Creek?
A. I think it was in the fall of 1887 or 1888, some time along there.
Q. That is, you prospected in Leadville in 1887 or 1888?
A. Yes sir.
Q. And then you went to Cripple Creek?
A. No sir, I didn't go to Cripple Creek from there.
Q. You went to Cripple Creek in 1892?
A. Yes sir.
Q. Where did you go to when you left Bassam *Bassam* Park?
A. When I left Bassam Park I went over here on the
67 divide, between Colorado Springs and Denver.
Q. You didn't prospect there, did you?
A. No sir, I done some saw-milling up there.
Q. So that before you went to Cripple Creek your experience in mining consisted in some prospecting in Leadville and some prospecting in Bassam Park?
A. Yes sir.
Q. That was the whole thing?
A. It didn't amount to very much, I think.
Q. How many veins had you prospected for and located in Leadville?
A. I didn't locate any what I called a vein.
Q. How many veins did you prospect for and locate in Bassam Park?
A. I think that we had a lead in Bassam Park.
Q. That was in 1887?
A. In 1887 or 1888.
Q. With the exception of the lead which you found in Bassam Park and your prospecting in Leadville, you hadn't practical ex-

perience as a miner until you went to Cripple Creek and went to work in this shaft, had you?

A. No.

Q. But you knew at once that there was no vein in the Tecumseh shaft?

A. It didn't look to me like a vein.

Q. And you also knew that there was none in the Ophir shaft?

A. It didn't look to me like any.

Q. And you had seen one vein before in Bassam Park?

A. I thought there was a lead there; it might not have been a vein, but it looked like a lead to me.

Q. That is, you think you had seen one vein prior to that time in your life?

A. Yes sir.

Q. That is correct, is it?

A. Yes sir.

Q. Did you measure this Ophir shaft and find it to be less than nine feet deep, before you worked on the Tecumseh shaft or
68 afterwards?

A. It was at the time we were working on the Tecumseh shaft.

Q. What did you measure it for?

A. I wanted to see how deep it was.

Q. What did you want to see how deep it was for?

A. Mr. Bridge told me he wanted to find out how deep that shaft was, and he asked me to go along to examine it.

Q. Did he say why he wanted to know how deep it was?

A. No sir.

Q. Did he say he proposed to locate over it?

A. No sir.

Q. Did you know that he proposed to locate over it?

A. No sir. His location was made before I was in Cripple Creek.

Q. I thought you said you helped stake it?

A. I helped survey it.

Q. Did you help to survey the claim known as the Tecumseh before you worked on the Tecumseh shaft or afterwards?

A. No sir.

Q. Before?

A. It was after we had the work completed, the 13 feet; some time afterwards; I don't remember just exactly the time but some time after that we surveyed and recorded; he got a surveyor and surveyed it and recorded it.

Q. And it was not until after it was surveyed and recorded that you examined the Ophir shaft; is that right?

A. No, we examined the Ophir shaft before we got our survey and recorded.

Q. So that, as a matter of fact, you did examine the Ophir shaft before the lines of the Tecumseh claim were run?

A. Yes sir.

Q. And wasn't it with a view of determining what its condition

was because you intended to run the lines of the Tecumseh so as to take it in?

A. I don't know what the views were at all.

Q. Did Mr. Bridge say anything to you about what he wanted you to measure it for?

A. No sir.

Q. How did you measure it?

A. The Ophir shaft?

A. Yes sir.

A. We measured it with a tapeline.

69 Q. And found it to be how deep?

A. It was somewhere between eight and nine feet; I don't remember the inches, but I know it was not nine feet deep.

Q. Can you give me the date you measured it?

A. It was some time in May 1892.

Q. Was there any snow in the shaft?

A. There might have been a little bit of snow in the bottom of the shaft, yes.

Q. Did you measure it from the top of the snow?

A. No sir; one of us went down. I went down in the shaft and kicked the snow away until I got to the dirt in the end of the shaft.

Q. How deep was the shaft and what was its dimensions?

A. It was about three and a half by six and a half or seven.

Q. Where did you kick the snow when you kicked it away?

A. I kicked it to one end; there was not much in there.

Q. Just the one side?

A. Perhaps to one side.

Q. Which side of the shaft did you measure—the lower or the upper?

A. We measured it at the upper rim, where the deepest part of the shaft was, up the hill.

Q. Do you tell the jury that at the deepest part, measuring it from the upper surface, that it was only eight feet and a few inches deep?

A. It was not nine feet.

Q. It was not nine feet at the deepest part?

A. No sir.

Q. Was there a discovery stake or notice at the Ophir shaft?

A. I believe there was.

Q. Did it have the name Ophir on it?

A. Yes sir.

Q. Did you measure it more than once?

A. I don't think that I went there more than once with the intention of measuring it.

Q. With whom were you working at the time Mr. Bridge got you to go there in 1893 and measure the shaft again when you

70 found it twenty-four feet, ten inches deep?

A. I was working on Big Bull mountain at that time, on a claim called the Aurelia H., I believe.

Q. Were you working for Mr. Bridge at that time?

A. No sir.

Q. Do you know how he came to send for you to help him measure that shaft?

A. He came up there, I think he came up from Denver, to measure that shaft, and came to our cabin and stayed there over night, and asked me whether I would go along over next day to measure the shaft.

Q. You were an old friend of his?

A. We had been friends, yes, in Denver; we had been acquaintances; we had never been friends.

Q. How did you get down in that shaft?

A. I went down on the timbers as far as there were any; from that you could easily get down to the bottom.

Q. How far down was it timbered?

A. I think about fifteen or sixteen feet, as near as I could remember.

Q. Did you drop from there to the bottom?

A. Yes sir.

Q. What sort of rock was the shaft sunk in, that part of the rock that is below the timbers?

A. It was sunk in what I would call porphyry.

Q. Was it porphyry in place?

A. I think it was in place.

Q. What do you understand to be rock in place?

A. I would count anything in place that hadn't been slid there or washed there.

Q. Do you call rock in place that can be worked with a pick?

A. There is some rock in place that can be worked with a pick.

Q. Where it has never been moved?

A. Where it has never been moved, yes sir.

Q. And you think the bottom of the shaft was in place?

71 A. I think it was.

Q. From where did you select your samples?

A. I took some from out the bottom of the shaft and some out of the sides of the shaft.

Q. Which side?

A. I think from both sides.

Q. Did you take any from the ends?

A. No sir.

Q. Just simply from the bottom and sides?

A. Yes sir.

Q. How many pieces did you take?

A. I think I had fully a dozen.

Q. What did you measure it with; what did you use?

A. A tapeline.

Q. Which side of the shaft did you measure from in this instance?

A. I think it was the upper side of the hill.

Q. So then you followed the same plan of measurement?

A. That was the side, yes.

Q. Did you measure from the lower portion of it?

A. I think that we measured it on both sides; it may have been

that this twenty-four feet ten inches, I would not be certain of that, was from the lower rim of the shaft.

Q. Was there a windlass at the time on the shaft?

A. No sir.

Q. Was there a platform?

A. There was sort of a platform, yes; you might call it a platform.

Q. Was there any appearance that the ground had been cut away for the purpose of building a platform or the timbers had been put there above the surface of the ground either one or the other?

A. That shaft was timbered a little above the surface of the ground.

Q. About how much?

A. I couldn't tell you that; the dump was around there.

Q. Was that above the surface at the lower part of the hole, or the upper part or all around?

72 A. It might not have been very much above it at the upper part of the hole; it was above it at the lower part of the hole.

Q. The timbers were level?

A. Yes sir.

Q. Did you see any place cut for the uprights of the windlass?

A. Yes sir.

Q. As though a windlass had been used there?

A. There had been a windlass used there.

Q. Were the uprights in place?

A. I think they were, if my memory serves me right.

Q. But the windlass itself was gone?

A. Yes sir.

Q. And that, you think, was a day or so before you went to Pueblo?

A. It was not over two days before I went to Pueblo.

Q. You went to Pueblo, did you?

A. Yes sir.

Q. What do you think was the length of that shaft at the time you measured it?

A. Outside of the timbers, or the part which was timbered?

Q. I will ask you first how long it was between timbers?

A. I would think it was about three by six between the timbers.

Q. How was it below?

A. It would be wider; I suppose it was four feet by seven or seven and a half.

Q. That would be true of the bottom of the shaft, then?

A. Yes, sir.

Q. When you located or helped to survey the Tecumseh, upon the shaft that you say you don't think had any vein in it, was there a crook in the side lines or an elbow in the side lines of the claim or were they run straight?

A. They were run straight.

Q. There was no change in their direction, then, so far as you remember?

A. No sir.

Q. I believe you said it extended southerly about one
73 hundred feet from the shaft?

A. I think about that much; I would not be certain.

Q. I understand that you are giving your best recollection?

A. Yes sir.

Q. And the balance, to make up the fifteen hundred feet, was northerly?

A. Northerly direction.

Q. Your best recollection is that it was not more than one hundred feet south?

A. It may possibly have been a little more than that.

Q. But the great bulk of the claim was north of the shaft?

A. The bulk was north, yes.

Redirect examination:

Q. What have you been doing, mainly, since 1892?

A. I have been mining, working in mines.

Q. That is six years?

A. Yes sir.

Q. Since that location?

A. Yes sir.

Q. What mines have you worked on?

A. I worked in the New Zealand; I worked in the New Zealand about nine months; I worked in the Morning Glory Number 2 of the Cripple Creek Gold Tunnel Company; I worked about 11 months. I worked in the Contention; I worked for the Gold Safety Mining Company and several others I don't remember.

Q. Prior to 1892 your practical experience in mining was limited, as I understand?

A. Yes sir; I didn't know very much about it.

Q. You had been in mines, had you?

A. I don't know as I had ever been in a mine that amounted to anything before that.

Q. Then your mining experience practically commenced in the spring of 1892?

A. Yes sir.

74 Q. What have you been doing in mines since then about Cripple Creek and that region of country—what kind of work?

A. I have been pounding the drill a good many days, and I have been sorting ore, at one time, in the New Zealand; that was the only time. And in the Morning Glory Number 2 I helped to save some ore there.

Q. How long were you sorting ore in the New Zealand?

A. I was ore-sorting about a month; that was the only time we took out any ore out of that ground; that is, I think the only time we took out any ore that I was working there and saved any.

Q. What mine were you working for last spring?

A. I was working in the New Zealand last spring when this suit was up; I believe that was last spring; I don't remember when that was, really.

Q. I will ask you to state whether in the light of your present experience, up to date, and your recollection of that shaft as it appeared in 1893, at the time this examination was made, whether in your opinion there was any discovery of any vein or deposit of mineral in that shaft?

A. There was not.

Recross-examination:

Q. I will ask you what your definition of a vein is?

A. My definition of a vein is anything that might bear mineral, gold or silver.

Q. You want to add to that, don't you, that it must be in place?

A. It would be in place.

Q. You would not call a placer location a vein?

A. No sir, certainly not.

Q. That is to say, anything that carries appreciable quantities of gold or silver in your judgment is a vein?

75 A. It would be a good enough vein for me.

Q. Isn't it a fact that in that camp vein-filling is largely composed of porphyry rock?

A. Yes sir.

Q. And that it so nearly resembles the country rock that it is difficult to distinguish it by the eye?

A. Very often you can't tell unless you assay it or pan it.

Q. You said in your former examination in the other trial of this case that there was rock in Cripple Creek that you don't think anybody can tell whether it is ore or not unless he assays it?

A. Yes sir.

—. Isn't it a fact, too, that this resemblance between the ore—that is, the porphyry which carries gold and the porphyry that is barren—is so complete that frequently a miner will get off his vein?

A. Yes sir.

Q. And get into the country rock for that reason?

A. Yes sir.

J. W. CARR, being duly sworn on behalf of the plaintiff, testified as follows:

Q. Where do you reside?

A. At Victor, Colorado.

Q. What is your occupation?

A. I have been mining for the last few years.

Q. For what length of time?

A. I have been mining, off and on, for 16 years.

Q. Are you acquainted with the Tecumseh lode?

A. Yes sir.

Q. Are you acquainted with the Ophir claim?

A. Yes sir.

Q. When did you first become acquainted with those claims?

A. Some time in February, 1894.

76 Q. In what way?

A. I took a lease and a bond on the Tecumseh lode, and I also had a contract with Mr. Beals for an interest in the property for finding a vein and doing a certain amount of development work on it.

Q. You took that lease and bond, you say, in the spring of 1894?

A. In February, 1894, yes.

Q. What was on the Tecumseh claim at that time by way of development?

A. There was a shaft between forty and fifty feet deep.

Q. Did you examine it?

A. I did; but I didn't go down into it; at least, no further than the bottom of the timbers; it was timbered down eight or ten feet, I would say.

Q. Did you examine the Ophir shaft at that time?

A. Yes sir.

Q. What was its depth at that time?

A. Between twenty-five and twenty-six feet.

Q. Did you measure it?

A. At this time, no sir, I did not; I didn't measure it until later on.

Q. When did you first measure it?

A. It was some time, I think it was probably in June, maybe later.

Q. Of 1894?

A. Yes sir; I don't know but what it was in July; it was after we commenced work; it was probably in July; it was after we commenced work up there continuously, and we didn't commence work until the 28th of June.

Q. Now you may proceed in your own way and state to the jury what you did by the way of work, and examination and prospecting there upon the Tecumseh lode?

A. In February 1894 Mr. Beals wrote me and asked me if I cared for a bond and lease.

Objected to.

77 A. Well, I received a bond and lease from Mr. Beals for an 18-months option on that property; I looked it over and write Mr. Beals that with the present condition of the property——

Objected to.

Q. Just state what you did?

A. I began work some time in April, or the latter part of March, 1894, for the purpose of trying to find a vein upon which to make a valid location.

Q. Prior to that, I will ask you, if you finally entered into an arrangement with Dr. Beals by which you were obliged to make a discovery of mineral?

A. Yes sir, I did.

Q. In pursuance of that you commenced work; when did you commence work?

A. It was either the latter part of March or the first of April.

Q. This was in 1894?

A. This was in 1894, yes.

Q. You knew that there was a controversy over this property at this time?

A. Yes sir, I was familiar with the status of the case up to this time.

Q. You knew that there had been an application for a patent by the Ophir people?

A. Yes sir.

Q. And a protest against the issuance of that patent?

A. Yes sir.

Q. And that it was then pending and undecided?

A. Yes sir.

Q. Now I will get you to state whether or not you examined the Ophir shaft and the Tecumseh property with the view of determining whether you would expend money upon that property or not?

A. That was the purpose of the examination.

Q. So you commenced work, you think, about the 1st of April?

A. I think it was the latter part of March.

Q. Where did you begin work?

78 A. It is near what is now known as the present Tecumseh discovery shaft; we began by trenching, looking for a vein. We found near the surface, just through the wash, what afterwards proved to be the hanging wall of our present vein. We followed that down to the depth of thirty-eight feet and we did about ten feet of drifting, east from the bottom of the shaft.

Q. That, as I understand, was in this shaft, known as the present discovery shaft?

A. Yes sir.

Q. That, you say, you sunk thirty-eight feet deep?

A. Yes sir.

Q. And run a drift of ten feet from there?

A. About ten feet, yes sir.

Q. What did you disclose at that time in that shaft by way of a discovery of mineral?

A. We discovered a well-defined vein, extending from near the top of the solid rock to the bottom of the shaft.

Q. Is that shaft substantially now in the condition it was at that time?

A. Yes sir.

Q. You have done no work upon it since?

A. No sir.

Q. What, if any, other work did you do upon the claim?

A. After sinking this shaft and running the little drift, we moved further up the hill and began search for the vein which the Minnehaha had opened near our east side line, and in searching for that we sunk two or three shafts and did considerable trenching and some drifting.

Q. Did you make any discovery in that shaft?

A. Yes sir; that is the shaft marked number 2; we had a very well defined vein, it was small.

Q. Mineral-bearing?

A. Yes sir, it assayed some.

79 Q. How deep did you sink that shaft?

A. My recollection is that it was between forty-five and fifty feet—about forty-five feet; somewhere along there.

Q. That was also in 1894?

A. Yes sir.

Q. About what time did you finish this shaft number one?

A. Number one was finished, I am inclined to think, about the middle of June; the middle or fore part of June.

Q. 1894?

A. 1894.

Q. About what time did you finish number 2?

A. Number 2 shaft and drift—we run a drift about twelve feet after sinking the shaft from the bottom of the shaft—that was completed about the first of September.

Q. Then what other work did you do?

A. We sunk shaft number 3 as marked on the plat.

Q. What was the depth of that shaft?

A. About forty-five feet—46, I think, exactly.

Q. What did you discover in that shaft?

A. We had a well-defined vein from the surface down, or, as soon as we were through the wash, to the bottom of the shaft.

Q. Mineral-bearing?

A. Yes sir. We also run a drift from the bottom of the shaft on the vein, north thirty feet—I think 36 feet.

Q. Was that in 1894 also?

A. That was also in 1894.

Q. Now, all of that time that you were sinking these shafts what was the condition of this Ophir shaft?

A. It was undisturbed; it remained at twenty-five feet in depth.

Q. When, for the first time, did they do any work in the Ophir shaft?

A. I think it was about the first of July, 1895.

80 Q. Is that Ophir shaft plainly visible from where you sunk these other shafts?

A. Yes sir; just within a few feet of them.

Q. Did you examine the Ophir shaft, or pass it frequently, during the time you were doing this work?

A. Yes sir.

Q. In 1894?

A. We ate our dinner at the top of it under a big tree there every day that summer.

Q. If any work had been done in that shaft from the time you first went to work until 1895, would you have discovered it?

A. Yes sir.

Q. That shaft, you say, remained at a depth of twenty-five feet?

A. About 25 feet, yes sir.

Q. You at one time measured it?

A. I did, yes.

Q. Was there any evidence of a discovery of mineral of any kind in that shaft?

A. I was unable to find any, no sir.

Q. Did you search for it?

A. Yes sir, I examined it for that purpose.

Q. As I understand you, you examined it for the purpose of determining whether there was mineral there?

A. That was the object, yes sir.

Q. And with the understanding that if there was mineral there, you would be wasting all of your money in doing this work?

A. I should not have put in all of this time if I had thought there was, no sir.

Q. And that work and expenditure was made on the faith of your belief, at least, and judgment that there was no mineral in that discovery shaft?

A. It was.

Q. Have you seen that shaft since then?

A. Yes sir.

81 Q. When, if at all, for the first time did they discover mineral in that shaft?

A. At about thirty-four feet from the surface, in sinking it after they resumed work in 1895, they came into the vein.

Q. Has there been or is there now in that shaft any indication of any vein above a point thirty-four feet below the surface in that shaft?

A. No sir, I think not; I am not able to find any.

Q. Have you done, or have others done to your knowledge, work upon the Tecumseh claim every year since then?

A. Yes sir.

Q. Amounting to at least one hundred dollars in value?

A. Every year, yes sir; more than one hundred dollars every year and some years a good many thousand.

Q. About how much work has been done upon the Tecumseh claim in all?

A. I don't know, but I would put it somewhere between nine and eleven hundred feet.

Q. Both in shafts and drifts?

A. Both in shafts and drifts and winzes.

Q. Did you file any affidavit of labor and improvements on the Tecumseh claim for some of those years?

A. Yes sir, for 1894, and 1895 at least.

Plaintiff then offered in evidence "Exhibits F and G," as follows:

82 STATE OF COLORADO, } ss:
El Paso County, }

Tecumseh Lode.

Before me, the subscriber, personally appeared J. W. Carr, who, being duly sworn, saith that at least (180 feet) fifteen hundred dollars' worth of work or improvements were performed or made upon the Tecumseh lode, situated in Cripple Creek mining district, county of El Paso, State of Colorado, as recorded in Book 10, page 118 of the records of said El Paso county, such expenditure made by or at the expense of J. H. Beals & others, owners of said claim, for the year ending Dec. 31, 1894, and for the purpose of holding said claim.

Said work was performed between the first day of March, 1894, and the first day of Dec. A. D. 1894.

J. W. CARR.

Subscribed and sworn to before me, this 23rd day of January, A. D. 1895.

My commission expires Dec. 14, 1897.

JOHN A. HOULAHAN, [SEAL.]
Notary Public.

Endorsed: Ex. F. Affidavit of labor and improvements. Tecumseh lode. State of Colorado, El Paso county, ss. Filed for record this 14 day of Feb'y, 1895, at 9.06 o'clock a. m. Recorded in Book 1, page 252. F. W. Howbert, recorder. Fees, $.35.

STATE OF COLORADO, } ss:
El Paso County, }

Before me, the subscriber, personally appeared J. W. Carr,
83 who, being duly sworn, saith that at least one hundred ten ($110.00) dollars' worth of improvements were performed or made upon the Tecumseh Lode mining claim, situated in Cripple Creek mining district, county of El Paso, State of Colorado, between the 1st day of Jan. A. D. 1895 and the 1st day of Jan. A. D. 1896. Such expenditure was made by or at the expense of J. W. Carr, Joseph H. Beals & others, owners of said claim, for the purpose of complying with the law and holding said claim.

J. W. CARR.

Subscribed and sworn to before me, this 30th day of December, A. D. 1895.

My commission expires June 11th, 1899.

WILLIAM E. PATTISON,
[SEAL.] *Notary Public.*

Endorsed: Ex. G. Affidavit of labor and improvements. State of Colorado, El Paso county, ss. Filed for record this 3rd day of Jan. 1896, at 4.46 o'clock p. m. Recorded in Book 2, page 172. F. W. Howbert, recorder. Fees, $.35.

84 Mr. THOMAS: They may go in subject to an objection I may make later.

Q. Those shafts number 2 and number 3 you state contained well-defined veins?

A. Yes sir.

Q. You didn't relocate on either of those discoveries?

A. No sir.

Q. Why did you not do so?

A. Simply because we had in our discovery shaft, we thought, a discovery and a vein that could not be questioned—its validity—we might have located on these and procured our title and made the discovery in these fully a year before, or nearly a year before the Ophir did any more work.

Q. Did you hear the expert witnesses for the defense upon the other trial of this case?

A. Yes sir, most of it.

Q. Do you remember as to whether or not they conceded that there was a well-defined vein in discovery shaft number 2 and number 3?

Defendants object as being immaterial; which objection was by the court sustained; to which ruling of the court, plaintiff, by his counsel, then and there duly excepted.

Mr. THOMAS: I will say now that we will not offer any testimony to the effect that there is not any vein in shaft number 2 and 3.

Cross-examined by Mr. THOMAS:

Q. You are still a party in interest in this suit, are you not?

A. Yes sir.

Q. What is the extent of your interest in this claim?

A. Of record, you mean?

Q. No sir, I mean actual?

A. I own a one-eighth interest in it.

85 Q. You first became connected with the matter for the interest you represent some time in the early part of the year 1894?

A. Yes sir.

Q. You said that you entered into an arrangement with Mr. Beals by which you were obligated to find a vein?

A. Yes sir.

Q. Is that arrangement in writing?

A. Yes sir.

Q. Have you got it with you?

A. No sir.

Q. Was it a contract?

A. Yes sir.

Q. Where is it?

A. I don't know, I am sure.

Q. Where was it when you last knew anything about it?

A. I have never seen that or known anything about it since some time in the summer of 1894.

Q. Before you made that arrangement had you examined what was then called the discovery shaft of the Tecumseh?

A. Yes sir.

Q. Had you also examined the surface boundaries of the Tecumseh?

A. Yes, sir, to a certain extent.

Q. How were they with reference to where they now are?

A. The boundaries were considerably west of where they now are.

Q. Considerably west?

A. Yes; in other words the shaft marked "old shaft" on that plat which was the discovery shaft of the first location, was in the center of the claim in respect to the side lines.

Q. Midway between the side lines?

A. Yes sir.

Q. And the southerly end line was pretty close to the shaft, was it not?

A. I don't know where those end lines were under that first location; I don't think I ever saw them.

Q. You never made any examination of it particularly for that purpose?

A. No sir.

Q. How do you fix the side lines as being equidistant
86 from the discovery shaft?

A. From the location certificate.

Q. The location certificate also fixes the number of feet along the vein—in length—and from the discovery shaft?

A. Yes. I probably knew when I consulted the location certificate at that time where the south end line was, but I have forgotten it.

Q. Why did you abandon that shaft?

A. Simply because there was no discovery of mineral up there.

Q. Then you began another shaft where your present discovery is? Did you do that work yourself?

A. No sir, that was done under contract.

Q. Who were the parties actually sinking?

A. A man named Christie.

Q. He had a contract from you?

A. Yes sir.

Q. When was the work begun—about when?

A. I think it was the latter part of March.

Q. You say you have a vein in that shaft?

A. Yes sir.

Q. At what distance from the surface does that vein appear?

A. Just as soon as you are nicely through the wash; I would say that it is probably six or eight feet down — you have what has since proved to be our hanging wall.

Q. What is the width of your vein?

A. The vein between the hanging wall and what I would consider the foot-walls is close to eight feet, I should judge.

Q. What is the filling of the vein?

A. It is a sort of silicious prophyry.

Q. What is the difference between the appearance and texture of the vein filling from the walls?

A. Very little; somewhat harder, apparently, and there are streaks in that large vein that seem to be somewhat different from the porphyry—more quartz.

87 Q. Are not those streaks to which you refer cracks that are between the outside cracks?

A. No sir; there are cracks there; there is also what might be called a vein, of itself, or what I would call the hanging wall of this large vein that constitutes about twenty or thirty inches running next to the hanging-wall side that is shown all of the way down.

Q. Isn't it a fact that there are three cracks that appear in the shaft and which are substantially parallel to each other at a point about fifteen or twenty feet in the shaft down to the bottom?

A. There are at least three, yes.

Q. Are not those the ordinary cracks that you find in porphyry?

A. No sir.

Q. Isn't it also a fact that there are horizontal cracks that run across the shaft at different places from the top to the bottom that are, to all appearances, like the cracks that your shaft has followed down?

A. I would call those the ordinary bedding planes that you always find in any formation, particularly where it is massive.

Q. Are not those ordinary bedding planes right in what you call the vein filling?

A. That is true, yes.

Q. Do you find the ordinary bedding planes of country rock in vein filling or veins?

A. Almost always, yes, on Raven hill; that has been my experience.

Q. Do you confine that circumstance to Raven hill?

A. I have had more experience on Raven hill in that particular locality than anywhere else.

Q. So that you tell the jury that on Raven hill the bedding planes of the country formation are found within as well as without

88 the veins.

A. Yes, sir.

Q. That is your experience?

A. Yes sir; I don't mean to say that they are always—in fact they are very seldom as plain and as well marked as they are perhaps in the Tecumseh shaft.

Q. There you notice them very plainly?

A. Yes sir.

Q. Which wall does your shaft follow going down?

A. We first have the hanging wall and we never lose that; it continues along down and forms the west side of our shaft.

Q. You can follow the hanging wall on the west side of your shaft clear down from the time you first get it?

A. From the bottom of the timbers from the time we first got it, yes, to pretty near the bottom; it might be right at the bottom, there is a little corner there that has not been shot out.

Q. Does the vein have a dip?

A. Yes sir.

Q. In what direction?

A. It is dipping to the west.

Q. About how many degrees from perpendicular?

A. I should say about fifteen or twenty degrees from perpendicular.

Q. How far did you go in that formation before you found the foot-wall?

A. About 22 feet; possibly 24 feet from the collar of the shaft, down to what when we were sinking the shaft we always supposed was our hanging wall; it was a wall that conformed in direction and dip with the hanging wall, and we followed it down and after we started to drift we found in breaking into this wall that it was not the foot-wall proper, but inside of that were five or six other slips an inch or two or three inches apart conforming with this other, making sort of twelve or fourteen inches of laminated matter lying next to the foot-wall.

Q. Throwing your foot-wall further to the east?

A. Yes sir.

Q. You say your vein is about seven feet wide?

89 A. I would say it was about eight feet wide.

Q. How wide is your shaft?

A. Three feet and a half, I should think, inside of the timbers.

Q. Your shaft, then, is a good deal narrower than your vein?

A. Our shaft is three feet and a half wide, and it is seven feet lone inside the timbers.

Q. Is it sunk across the vein or lengthwise?

A. It is sunk across the vein.

Q. So that the greatest length of the shaft is across the vein?

A. It is at right angles with the strike of the vein.

Q. The vein passes through the sides of the shaft instead of the ends?

A. Yes sir.

Q. What is its general direction?

A. Nearly north and south.

Q. Does it make an elbow in the shaft?

A. No sir.

Q. What did you make an elbow in the claim for?

A. I didn't locate the claim.

Q. You helped set the monuments, didn't you?

A. No sir.

Q. Who did set the monuments on the claim?

A. I understood that a man by the name of McNutt, an United States deputy surveyor set those monuments.

Q. Didn't you help him do it?

A. No sir.

Q. Didn't you testify on the former trial how the surface boundaries were marked?

A. I may have testified how they were marked; yes, I probably did.

Q. Didn't you state that the surface boundaries of this location were marked by stone monuments?

A. Yes sir.

Q. Six of them?

A. Yes sir.

Q. That they were ordinary oblong stones with one end stuck in the ground and each numbered, beginning with number one,
90 and following around the claim, as called for in the location certificate?

A. Yes sir.

Q. That is the way the claim was located, is it?

A. Yes sir.

Q. With those stone monuments?

A. Yes sir.

Q. But you didn't help to set them?

A. No sir.

Q. Who employed this man McNutt to make the survey?

A. Mr. Beals I believe.

Q. Do you know why that angle was made?

A. I suppose it was to take in all the public domain possible by that location.

Q. Wasn't it to get a hundred and fifty feet on each side of the shaft in the center of the claim and then locate it as nearly over the Ophir claim as possible?

A. I don't know; we didn't consider that there was any Ophir at that time, I didn't at least; and it was located, as far as I am concerned, without any reference to the Ophir, but merely in respect to what vacant ground there might be there.

Q. That was the only ground that was not located, wasn't it, at the time, the ground that was called the Ophir; or at least that you thought was open?

A. As I said before, we didn't recognize that there was any such ground as the Ophir.

Q. I understand, but the ground which the Ophir location covered—or purported to cover, was, in your judgment, the only locatable ground at that time?

A. There was other ground there that we knew their rights were prior to us; I don't know what the object was; I know if I located it I would have tried to have taken in all the public domain I could with that location from that discovery shaft.

Q. And that which you treated as public domain at the time was the ground embraced in the Ophir location?

A. Yes sir.

91 Q. That is the real reason, is it not, that there was an elbow made in the claim?

A. I don't know what the reason was but I suppose that was the reason.

Q. How long after you had struck this vein in your discovery shaft was this location made?

A. It is my recollection that it was several days; I know that we were very careful to make no location until we were certain that we had something upon which to base a valid location.

Q. Did you make your location after the shaft got thirty-eight feet deep or before?

A. I am of the impression that it was before.

Q. How much before?

A. I don't remember.

Q. You sunk it 38 feet deep and then you ran a drift south?

A. Yes sir; I would say to the east.

Q. How far?

A. About ten feet.

Q. Do you mean you ran it east on the vein?

A. No.

Q. Or across the vein?

A. Across, in the country, I should say.

Q. About when was that work finished?

A. Some time in June.

Q. Of 1894?

A. Yes sir.

Q. Before you began shaft number 2?

A. Yes sir.

Q. Isn't it a fact that from that good hour until this there has never been any further work done upon the discovery shaft?

A. I don't know of any; it looked as though the Ophir people had been working in there the other day.

Q. The Tecumseh people had not done any work since then, have they?

A. Except I put in a shot there about six weeks ago.

Q. Just one shot?

A. Yes sir.

Q. Where did you put that?

A. About 22 feet down on the north side.

92 Q. With that exception have the Tecumseh people done any work there?

A. No sir, not that I know of.

Q. So that you had a vein that you think was eight feet wide——

A. I have not been in the district for over a month; I have been in Denver.

Q. But, with the exception of the time that you have been in Denver during the past month, you know of no other work that has been done?

A. I know there was no more work done by the Tecumseh people up to that time.

Q. So that, upon a vein eight feet wide that you had discovered there in 1894 and made a location upon, there has been no work or development done since 1894 in the month of June?

A. No sir.
Q. Why?
A. Simply because we had ore up above afterwards.
Q. You had a better prospect somewhere else?
A. Yes sir, and we hadn't any money to waste.
Q. But you didn't have any eight-foot vein up there, did you?
A. Yes, sir, we have got one vein up there fourteen feet.
Q. Where is that—in your shaft number 2?
A. No; shaft number 4; I don't know but what it is more than that; it is a big one.
Q. That is the cross-vein that you find in north of the shaft, isn't it?
A. No sir; I am inclined to think it is the same vein we have in our discovery shaft, running in the direction of our discovery shaft.
Q. You think it is that same vein?
A. I am inclined to think if it was followed up it would prove to be the same vein.
Q. Does it run through shaft number 4?
A. It runs through shaft number 4; yes sir.
93 Q. Directly through it?
A. At the top, yes; or near the surface; you soon get out of it in sinking the shaft.
Q. When did you claim that the vein in your discovery shaft is the one that runs through shaft number 4?
A. We always thought so after we found it in number 4.
Q. When you were on the stand before, at the other trial, you produced a plat?
A. Yes sir.
Q. Which showed that circumstance?
A. Yes sir.
Q. Do you remember that?
A. Yes sir.
Q. Where is that plat?
A. I don't know, I am sure; I have not seen it since.
Q. Do you remember what you said about it?
A. Something, yes.
Q. What did you say?
A. I don't just remember what I said.
Q. Didn't you say this: "You say there is an indication there of an intersection of two veins? A. Yes sir, 240 feet of our shaft is sunk right on the intersection of two veins crossing each other at a very acute angle. *A.* Crossing each other at the angle represented there? A. At about the angle that is represented there. Q. This vein and that vein? A. Yes sir. Q. Would the strike of this vein disclosed in the discovery shaft, if it continued in a direct line, intersect the other vein at that point? A. Well, it hardly appears so since my examination; it looks as though it would run west of it; I always had supposed it was the vein that crossed it in shaft number 4, and I have no reason to suppose it has not probably swung

around because that vein, it is a pretty strong vein, and it has the same dip as the vein in the discovery shaft."

A. Yes sir.

Q. There you say that you examined it the other day and it looked as though it ran west of it?

94 A. I say that by looking down our discovery shaft it does look as if it would run west of number 4 shaft.

Q. It would have to make a very strong bend to the east?

A. No sir, not a very strong bend.

Q. A considerable bend?

A. If it pursued a straight course as exposed in the discovery shaft, it would go to the west, but veins don't always do that.

Q. I understand that. Didn't you make your plat that you exhibited here at the last trial before you made your last examination of the shaft?

A. It was before the last examination; yes.

Q. Didn't that plat show a line which you had drawn from the discovery shaft to shaft number 4 indicating that the vein appeared in there?

A. Yes sir.

Q. But then you made this statement after an examination?

A. Yes sir.

Q. Is that the fourteen-foot vein that you are talking about?

A. Yes sir.

Q. Where does it appear fourteen feet thick?

A. Near the fourteen-foot level.

Q. In number 4 shaft?

A. Yes sir.

Q. You sunk shaft number 2 in 1894, did you not?

A. Yes sir.

Q. That was due to the development made in the Minnehaha shaft? Wasn't it?

A. Yes; we were looking for the Minnehaha vein.

Q. Did you examine the Minnehaha workings before sinking that shaft?

A. Yes sir.

Q. And then, having made the examination, you started number 2 shaft at this point? I believe it is marked shaft number 2?

A. Yes; what is marked shaft number 2 on the diagram.

95 Q. How deep did you go there before you struck a vein?

A. We had it just as soon as we were through the wash—five or six feet.

Q. In porphyry?

A. Yes sir.

Q. What was the width of it?

A. It varied from two and a half in some places to four feet.

Q. Dipping in what direction?

A. Dipping west.

Q. Are you sure of that?

A. Yes sir.

Q. In number 2?

A. I am thinking of number 3.

Q. I am talking about number 2.

A. Excuse me. That vein was only a few inches wide in number 2.

Q. And it dipped to the east, didn't it?

A. It dipped to the east, yes sir.

Q. How deep did you sink that shaft?

A. About 45 feet.

Q. Then you drifted in what direction?

A. Easterly; but it dipped out of the shaft and our shaft went on down vertically, and the bottom of the shaft was out of the vein so that we drifted out to cut the vein; we cut the vein in about six or eight feet.

Q. That was at the depth of forty-five feet?

A. Yes sir, about 45 feet.

Q. Have you done any work on that since?

A. No sir.

Q. That has practically, then, been abandoned, hasn't it, for the present? Since 1894 no work has been done on it?

A. Since 1894 no work has been done on it.

Q. When did you begin shaft number 3?

A. Shaft number 3 was begun in September, the fore part of September, 1894.

Q. Did you go back to the Minnehaha shaft and take some new bearings?

A. We visited the Minnehaha shaft quite frequently; we were on friendly terms with the parties that were sinking it, and had free access to it, and we used to go down there very often and try
96 and get some conclusion as to where that vein would go when it struck our ground.

Q. Then you did some trenching up there, didn't you?

A. Yes sir.

Q. Right over your line?

A. Yes sir.

Q. Then you sunk that shaft?

A. Yes sir.

Q. And you cut that vein?

A. Yes sir.

Q. How far below the surface was it that you got it?

A. About five or six feet.

Q. You sunk 46 feet?

A. Yes sir.

Q. That shaft was almost on a line, wasn't it, between the Minnehaha and the Ophir discovery?

A. Very nearly; it was a lit-le east.

Q. About what time did you finish sinking that shaft forty-five feet deep?

A. I don't think that was finished until in November some time.

Q. Of 1894?

A. Yes sir.

Q. Then you drifted?
A. No; the sinking must have been finished earlier than that—during October some time.
Q. Your drifting and sinking, all together, you got through with in November?
A. Yes sir; the latter part of November, I should think.
Q. What direction did your drift run?
A. Nearly north.
Q. In the direction of the Ophir shaft, wasn't it?
A. Yes sir.
Q. Has any work ever been done upon that since?
A. No sir.
Q. How long was it after that before work was resumed on the Ophir shaft?
A. It was the next summer, I think, in the latter part of June or the first of July.
Q. In 1895?
A. 1895.
Q. What work did the Tecumseh people do during 1895?
97 A. They did a little work in number 3 shaft, just a little; started to straighten up that shaft. They did some trenching out north of number 4 shaft, and also started number 4 shaft.
Q. They did about something over $100.00 worth of work, didn't they, in 1895?
A. I believe one hundred and ten dollars' worth they paid for besides some work I did myself.
Q. Did you begin shaft number 4 until the Ophir shaft was sunk to its present depth?
A. No sir.
Q. Did you begin shaft number 4 until the Ophir people began to ship ore from their shaft?
A. No sir.
Q. When was it that the Ophir people began to ship ore?
A. I don't know; I don't know of their ever shipping any ore except from hearsay.
Q. You do know that they got some ore out of the shaft and put it on the dump, don't you?
A. Yes sir.
Q. And it was after that that you began shaft number 4?
A. Yes sir.
Q. You began it very near the Ophir shaft, didn't you?
A. Yes sir, 40 or 50 feet from it.
Q. And you took the ore from the Ophir shaft and shipped and sold it, didn't you?
A. Took the ore from the Ophir dump.
Q. That had come out of the Ophir shaft?
A. I suppose that that is where it came from.
Q. What the defendants had taken from the Ophir shaft and workings connected with it?
A. Yes sir.

Q. When was that?

A. That, I think, was in 1895. It may have been in 1896.

Q. Why did you locate your shaft number 4 so near to the
98 Ophir shaft?

A. We were looking for ore. I don't know; I could have got a great deal nearer.

Q. You might, but you didn't?

A. No.

Q. Isn't it a fact that you got somewhere in the vicinity of the Ophir shaft on account of the fact that the Ophir had struck a body of shipping ore?

A. That, no doubt, was mainly the reason for it.

Q. And when you had sunk to the level of the bottom of the Ophir shaft you drifted towards the Ophir shaft and make a connection with the Ophir drift?

A. Yes sir.

Q. Then you put a barricade there, didn't you?

A. No sir.

Q. A barricade was put there, wasn't it?

A. Yes sir.

Q. By whom?

A. By Mr. Parks, I believe; I am not certain.

Q. He was your superintendent, wasn't he?

A. No sir.

Q. Before you began the Tecumseh shaft didn't you organize the Tecumseh Mining and Leasing Company?

A. No; not until after we began the shaft.

Q. How long after?

A. A short time; I don't remember just how long.

Q. Who composed the Tecumseh Mining and Leasing Company?

A. Every man that held stock in it—Mr. Lynch, his brother and myself, and Frank Ingersoll and a man named Adams were the incorporators.

Q. That consisted of one million shares, didn't it?

A. Yes sir.

Q. And you sold stock, didn't you, for the purpose of getting money to sink that shaft?

A. Yes sir.

Q. That is the way the money was raised that was expended in sinking that shaft?

A. Yes sir.

Q. About when was that shaft begun?

99 A. It was begun some time in December, 1895.

Q. At about what time was it sunk to a level with the bottom of the Ophir shaft?

A. It probably reached the level probably along the latter part of February, I expect.

Q. When did you first examine the Ophir shaft?

A. For the first time?

Q. Yes. I mean to make a real examination?

A. It must have been in March, I suppose, or February, 1894.

Q. Who was with you?

A. When I examined it there was nobody, I don't think. There was a man named Fuller went over there with me but I don't think he was there with me this time; I am pretty sure he was not.

Q. How carefully did you examine it?

A. Very carefully. Carefully enough to satisfy myself that it hadn't any vein, and about its depth, although I didn't measure it at that time.

Q. What is your definition of a vein?

A. Mineral-bearing matter in walls or boundaries.

Q. In place?

A. In place, yes.

Q. Are the walls and boundaries to which you refer something that you must see, something that must be visible?

A. Yes sir.

Q. And unless they can be seen with the eye they are not walls in your judgment, are they?

A. I would not call them walls unless I could see them.

Q. Nor would you call mineral, unless it was bounded, a vein, would you?

A. I think somewhere there would have to be walls to the vein.

Q. Visible to the eye?

A. Yes, sir.

Q. Isn't it a fact that the vein filling, especially on Raven hill, is very largely composed of porphyry?

A. Yes sir.

100 Q. Isn't it a fact that the vein filling in its appearance to the eye is quite similar to the country rock?

A. Yes sir.

Q. And isn't it a fact that it sometimes requires an assay to distinguish the country from the mineral?

A. Very often.

Q. Isn't that true with reference to mines on Raven hill and in the vicinity of these mines?

A. Yes, but I have never seen a place where there was not somewhere a line of separation that could be easily seen.

Q. A visible line?

A. A visible line of separation.

Q. You have never seen anywhere that that was not the case?

A. I *b*ever have, no.

Q. How extensive has been your experience on that hill?

A. I have been on that hill almost continuously for the last four years.

Q. On this property or some other property?

A. Most of the time on this property, and other property, too.

Q. What other properties?

A. The Morning Glory and the Phœnix and on the Gregory.

Q. Just above these?

A. Yes sir.

Q. At the time you began to sink the discovery shaft of the cumseh, and I mean by that the shaft you first sunk in 1894, you see a notice that had been put upon the premises warn people from working on that ground?

A. No sir.

Q. Did you ever hear of it?

A. Yes sir; Mr. Christie told me that there was such a not posted up there.

Q. Who was Mr. Christie?

A. He was the man that sunk this shaft; he did the work.

Q. When did he tell you that he had seen the notice?

A. About the time or shortly after it was put up.

101 Q. So that you were informed of the fact that there one?

A. Yes, I knew of it.

Q. And you knew that all of the time that you were doing t work, that there were people claiming the Ophir location there pretending to own it, didn't you?

A. I knew of the Ophir's claims, yes.

Q. You told General Johnson, in answer to one of his questio that you would not have put in your time and money if it had been for the fact that you were quite sure that there was no vein the Ophir shaft?

A. Yes sir, that is true.

Q. That you would not have made this expense that you speak but for that?

A. That is true.

Q. And that in consequence of that you have been to this pense?

A. That is true.

Q. Didn't you locate ground in the Ophir that is not included the Tecumseh here and call it the Whale?

A. Yes sir.

Q. And didn't you sell that for $18,000.00?

A. No sir.

Plaintiff objects as being immaterial.

Q. What did you sell it for?

Plaintiff objects; objection sustained; defendants except.

Q. I believe you say that in this shaft there is a vein—I mean Ophir shaft—about 35 feet down; what sort of a vein is that?

A. In what respect?

Q. In any respect; what is its appearance?

A. It is a small vein, probably from two to three inches wi composed of a dark brown oxidized matter.

Q. What are its walls composed of?

A. Porphyry.

Q. What is the filling?

A. Quartz.

102 Q. What is the color of the filling, as compared with the color of the walls?

A. Very much darker.

Q. What part of the shaft does it first appear in?

A. In the northeast corner.

Q. In the northeast corner?

A. I would call it the northeast corner.

Q. You first saw it coming into that corner?

A. Yes sir.

Q. How does the shaft lie with reference to its greatest length?

A. Its sides, that is the ends, form what I would call the west and east; the sides or long part of the shaft are on the north and south, although not exactly.

Q. About what is the width of the vein at the point where it comes in?

A. Two or three inches.

Q. About what is its dip?

A. I would say about 20 degrees from the perpendicular.

Q. When you say that it first appears in the northeast corner, do you mean that the hanging wall of it first appears or the foot-wall?

A. The first part of it would be the hanging wall.

Q. Does the shaft from that point follow the vein down to the bottom?

A. It does not follow the vein, no; but the vein continues in the shaft all of the way down to at least the top of the drift.

Q. And the top of the drift is just five or six feet from the bottom of the shaft, isn't it?

A. About six feet from the bottom of the shaft.

Q. Where does it go after it reaches the point where the top of the drift is?

A. It has been mined out and nothing left but the hanging wall; the hanging wall, of course, continues on down to the bottom of the shaft.

103 Q. There is a drift, is there not, running both north and south at the bottom of the Ophir shaft?

A. Yes sir.

Q. Connecting northerly with the drift from shaft number 4 of the Tecumseh?

A. Yes sir.

Q. And running southerly about how far?

A. They did a little work here the last of the year; I guess about twenty-five or thirty feet south.

Q. At the time you made your arrangement with Dr. Beals, had the Land Department determined the question of the entry of the Ophir or was it still pending?

A. It was still pending.

Q. How much work had you done before finally a decision was reached?

A. Before the Secretary of the Interior's decision?

Q. Yes?

A. I suppose from twelve to fifteen hundred dollars' worth.

Q. That is to say, you had done more work than that involved in sinking the discovery shaft?

A. Yes, sir.

Q. Who was associated with you in doing this work under your contract with Dr. Beals?

A. Mr. Lynch.

Q. P. J. Lynch?

A. P. J. Lynch.

Q. Any one else?

A. Not up until this time, no.

Q. Who afterwards?

A. The Tecumseh Gold Mining Company.

Q. Is that the name of the corporation—the Tecumseh Gold Mining Company?

A. Yes sir.

Q. Isn't it a fact that the reason that you quit work upon the discovery shaft that the Minnehaha had opened up what seemed to be a pay-vein further to the east?

A. The object in going up there was to try and find the same vein that the Minnehaha people had. It was——

Q. Didn't you say upon the other trial, this: "What
104 caused us to quit work on the discovery shaft was the fact that the Minnehaha people had opened a vein just about twelve feet from our side line, or from the side line of the Whale?"

A. Yes sir.

Q. "Q. From which side line? A. From the east side line that was running up?"

A. Yes sir.

Q. That then, was the reason, was it not, that you went over to that part of the ground?

A. Yes sir.

Q. Did you say that any work was done by the Ophir people upon the Ophir claim in 1894?

A. No sir, no work was done.

Q. At any time during the year 1894?

A. No sir.

Q. Were you at work there all of the time from the commencement to the end of the year 1894?

A. From the time we commenced in 1894 until about the first of December, yes; every day, except Sunday, I mean.

Q. You didn't begin until some time in April, did you?

A. No sir.

Q. You were not up there in January, February and March?

A. We didn't commence work, no; I was up there a number of times, probably in March and February.

Q. You were not there from the first of December to the first of January, were you?

A. In 1894?

Q. 1894.

A. Yes, I must have been on the ground; but I don't think we done any work in 1894 at all.

Q. Were you on the ground every day?
A. No.
Q. Were you doing work there at all after you finished the 35-foot drift at the bottom of your shaft number 3 which you say was finished in November?
A. Yes sir, we sunk three trenches at different distances above number 3; one trench is nearly east of the Ophir discovery
105 shaft and another one is nearly east of the present number 4 working shaft, and another one is probably one hundred feet still north of that.
Q. That was done in 1894 in December?
A. Yes sir.
Q. Who did this?
A. Mr. Lynch and myself and Mr. Lynch's brother.
Q. Then you were doing work up there in December?
A. That was in the fore part of December we did this.
Q. How many days in December did you do that work.
A. I don't remember.
Q. Did I understand you to say that there was no work done there by the Ophir people in 1895?
A. Yes; they resumed work about the first of July 1895.
Q. Did they do any work between the 1st of January and the 1st of July, 1895?
A. No sir, not unless it was the latter part of June.
Q. At the time they resumed work on the shaft; that is what you mean?
A. Yes sir.
Q. Then, do I understand you to say to the jury that from the time that you became acquainted or identified with this ground until some time in June or July 1895, the Ophir people did no work upon that property?
A. Yes sir.
Q. And if they had done it you would have known of it?
A. I certainly would.
Q. Did you so state in your testimony in the trial of the case before?
A. I think I did, yes.
Q. Have you seen your testimony?
A. Yes sir.
Q. Do you remember the distance in the discovery shaft of the Ophir in the other trial, that you placed the point where the vein first came into the shaft?
106 A. Yes sir, I think 34 feet, about 34 feet.
Q. You said today 35 feet?
A. No sir, I didn't intend to say 35 feet.
Q. If you said it, it was a misapprehension was it?
A. Yes sir.
Q. It was somewhere then in the neighborhood of 34 feet?
A. Yes sir.
Q. I believe you said that you did not relocate on your other dis-

coveries in shafts number 2 and 3 because you thought you had a good vein in your discovery shaft?

A. Yes sir.

Q. That is to say that you were satisfied that the vein that was in that shaft was all that was necessary?

A. Yes sir.

Q. And for that reason it was not at all necessary that you should make a location upon some other vein discovered somewhere else?

A. No sir; we discussed that matter and have made an amended location whereby we would have to lose no rights we had already obtained.

Q. But you never did make an amended location, did you?

A. Not after locating the present.

Q. Upon the 38-foot shaft?

A. Yes sir.

Q. But that was not an amended location, was it?

A. I am inclined to think it was.

Q. You changed your discovery shaft, didn't you?

A. Yes sir.

Q. Do you know who signed the location?

A. The notice?

Q. Yes?

A. Beals' name was on the notice.

Q. You put in Mr. Beals' name, did you not?

A. Yes sir.

Q. And the discovery mentioned there was the 20th of April, 1894?

A. Yes sir, I believe that is the date.

Q. That is the last location you know anything about of this claim is it?

A. Yes sir.

107 Q. Can you state about what the depth of that shaft was on the 20th of April, 1894?

A. I think it was about 25 feet; I think that location was made about the time we got to the second wall or what we considered the foot-wall.

Q. Of what does your nine to eleven hundred feet of development work consist? Made upon that property?

A. It consists of these four shafts that are marked here.

Q. Shafts 1, 2, 3, and 4?

A. Yes sir, shafts 1, 2 and 3 for about ten feet—number 1 has about fifty feet of work.

Q. That would be 38 feet of shaft and how much drift?

A. About ren feet of drift; I never measured it.

Q. I understand all this is an estimate?

A. Yes sir.

Q. Shaft number 2?

A. Shaft number 2 was about 45 feet deep and has about 16 feet of a drift, I should say.

Q. I thought you said in your direct examination that it was 12 feet?

A. No, I didn't; I said about 12 cut the vein; we went considerably through the vein.

Q. You put it now at about 16 feet?

A. I should say it was about sixteen.

Q. How about shaft number 3?

A. I think it is forty-six feet deep and 36 feet of a drift.

Q. I thought you put it at 35 a few minutes ago?

A. I think we measured it and that it was 36 exactly, although I am not positive about that; and shaft number 4 180 feet in depth. Now at the forty-foot level there is a drift run south about 12 feet, and there was one continuous drift in a northeasterly direction.

Q. At forty feet?

A. Yes sir, at 40 feet; about 75 feet I should say there is one drift that crosses that and runs both north and south of that drift; that is about eighty feet long, I should judge, or about ninety,
108 maybe. Just at the 80-foot level we drifted just far enough to connect with the Ophir drift.

Q. That would be about how far?

A. About eight feet, I should judge, and we drifted north 52 feet straight. Then there is an east and west drift on the big vein about, I should say, 125 feet.

Q. What else?

A. There is a winze down from that 50 feet, I believe; then from the bottom of the shaft there is one straight continuous drift north about 132 feet; I think it is just 132 feet; and then there is an easterly and westerly drift, a drift in east about 20 feet, I should judge and a drift west about 35 feet. There has been a little work done there since I went to Denver, I don't know what it consists of,—not much, though.

Q. That is substantially all of it?

A. There is an upraise from the 80-foot level connecting the two drifts.

Q. Isn't that the winze that you were just talking about?

A. No, the winze is down from the 80-foot level.

Q. This is up?

A. Yes sir; that is forty feet.

Q. Any more?

A. That is all that I think of outside of the stoping; we stoped some ore.

Q. With the exception of the number 1 shaft and drift at the bottom of number 2 shaft and drift at bottom of number 3 shaft, all this work is connected with shaft number 4, isn't it?

A. With the exception of a good deal of trenching I have not enumerated at all.

Q. Trenching on the surface?

A. Yes sir.

Q. All of this work from number 4 shaft including the shaft itself, has been done, has it not, since the Ophir opened up pay ore?

A. Yes sir, it has been done since the Ophir opened up pay ore.

109 Q. And it has been done, has it not, the greater part of it, upon a lease and bond from you to some other people?

A. No sir, a great deal of it was done by the present company.

Q. It has been done by a man named Hawkins, hasn't it?

A. No sir, a great deal of it was done by Hawkins as president of the company.

Q. What company?

A. The Tecumseh Gold Mining Company.

Q. Under a lease and bond held by that company?

A. Yes sir.

Q. Who is Hawkins?

A. He is a man living in Albany, New York.

Q. And represented here by a special counsel in this case, is he not?

A. I don't know I am sure anything about that.

Q. Do you want to include that trenching in that eleven hundred feet?

A. It is hard to estimate that; no, I have not.

Q. Then when you said nine to eleven hundred feet you had reference to the work that you have enumerated?

A. Yes sir, I never footed it up; it was only an estimate.

Q. I have a copy of your testimony here in the other trial, and if you will during the progress of the trial take it and show me where you testified that no work was done by the Ophir people in 1894 I will be obliged to you?

A. I merely said that I didn't say that they did no work, I think, Mr. Thomas; that was my intention. I don't know whether I testified in relation to any work in 1894 or not.

Q. I think, as a matter of fact, you did not; that you were not asked about it?

A. That is possible; but I understood you to ask me if I said that the Ophir did do some work.

Q. No, my question was intended to be, at least, did you upon the other trial testify as you have now testified that no work was done on the Ophir at that time?

110 A. If I testified on that point I must have testified to that.

Q. If you testified at all upon that subject you said so?

A. Yes sir.

Q. The question was whether you testified at all upon that subject?

A. I don't remember having testified at all about it.

Redirect examination:

Q. How deep did you say the Ophir shaft is now?

A. 70 feet.

Q. How much drifting have they done?

A. I never measured the drift; they drifted north within eight or ten feet of our shaft; I think about forty feet long their drift was.

Q. As I understand you, at the 80-foot level you drifted out and connected with them?

A. Yes sir; we drifted south and made a connection.

Q. Were you there when that connection was made?

A. I was.

Q. Did you connect with them by drifting out or by sinking down into their shaft?

A. It was by drifting south; the collar of our shaft was about eight feet higher than the collar of the Ophir shaft by reason of the fact that it sets a little further up the hill, and when we had sunk our shaft down 78 feet we started to drift south to connect with the Ophir people's drift running north and the fact is that we were not quite low enough by about 18 inches or two feet, and the result is that it left a jog or offset which is shown to be in the roof and shows that the connection must have been made from the north in that drift, coming south; the old holes are in evidence today.

Q. When was that connection made?

A. It was some time in the spring of 1896, three or four months after we had started work at shaft number 4.

111 Q. Were they at work there at that time?

A. No sir.

Q. Had they done any work there in 1896 up to that time?

A. No sir.

Q. Then this work of sinking the shaft from 25 feet to 70 feet and drifting out this forty feet was done in 1895?

A. Yes sir, it was done in 1895.

Q. What work, if any, did they do in there during the year 1896?

A. In 1896 they didn't do any work there except hoist a little waste from the bottom of the shaft and pass through that drift and across our shaft, and did some work in the breast of a drift that we were driving north about eighteen or twenty feet, I think. They drove that about 15 feet, I should judge, further north.

Q. In other words, the only work they did in 1896 they did after going in through your workings, going to the breast of your drift?

A. Yes sir.

Q. And running in that about 15 feet?

A. Yes sir.

Q. How far was the breast of the drift from your shaft?

A. About 18 or 20 feet if I remember correctly.

Q. To the point where they did this work?

A. It was in about 18 feet I should judge, where they commenced, near that particular shaft.

Q. Then they utilized the eight feet that you had run to make that connection, pass through your shaft and through your drift eighteen feet to reach the point where they did this work in 1896?

A. Yes sir.

Q. And that is all the work that they did in 1896?

A. Yes sir; that is all.

Q. What work was done in 1897?

A. In 1897 they commenced work, I think it was the 16th

112 of last December; they put two men to work there—there might have been three men the first day or two days, and

they worked on up to the first of the year and a day or two after the first. I think; I am not sure about that.

Q. Where was that work done?

A. That was done driving the drift south from the bottom of the Ophir shaft, and a good deal of it was done in raising some waste.

Q. That was a new drift there?

A. No, not a new drift; a continuation of an old drift they had run in 1895.

Q. You spoke of the discovery notice there that was put up at the time of this second location; did you examine that notice?

A. Yes sir.

Q. Do you remember what it contained?

A. I don't remember all that it contained from memory, but I do remember of at least three things it contained, and that is it contained the name of the lode, the name of the locator and the date of location from the fact that I examined it for the purpose of seeing whether it was regular and all right; and while I cannot remember now from having read the notice that the date on it was April 20th, at the time I read it I knew what the date of the discovery should be, and if it would have been wrong, I would have corrected it. If it contained any other name than Dr. Beals I should have corrected it or if it had contained or claimed ground as any other lode than the Tecumseh I would have set about to correct it, but it did not.

Q. In other words, while you cannot remember those things exactly, you remember examining to see that they were correct?

A. Yes sir.

Q. And if they had not been correct you would have known it?

A. Yes, sir.

113 Q. You had the date and information at the time which would have discovered the error; is that your position?

A. Yes sir.

Q. Did you know Mr. McNutt, who made this second location?

A. No sir.

Q. You were asked something about the shape of the claim and the reasons for it etc.; this ground south of the Ophir was public domain, was it?

A. No, I think that at that time it was covered by the Arequa town site, mostly, and a claim called the Sundown.

Q. There were other claims up in there that seemed to conflict with both the Ophir and the Tecumseh, were there not?

A. Not as it is marked there now, no sir; but if our side lines had been straight in either direction—that is, if the north end had been continued on straight to conform with the present south end line it would have conflicted with the ground to the west of the north side.

Q. Do you know where the Golden Wedge is in there?

A. Yes sir; it lies up in that vicinity, and it would have conflicted with that to a great extent.

Q. Wasn't it the evident object of the United States surveyor in fixing that shape to the claim to avoid prior locations as much as possible; from your knowledge of the ground would you not say that is it?

A. It is hard to say what a man's motives are for doing anything, but I would naturally conclude that it was to take in as much of what we considered public domain, as possible.

Q. And avoid other claims?

A. And avoid other claims.

Q. Much time has been spent in asking you why you did not work in this discovery shaft before and after you had a discovery of a vein there, instead of going to these other various places and
114 working; what was the reason?

A. There might have been a good many reasons for it but I suppose the principle one was the fact that the Minnehaha had opened up a very nice looking vein up there.

Q. Was the grade of this ore—did that have anything to do with it?

A. In the discovery shaft?

Q. Yes.

A. It certainly did; it was not pay ore by any means; we were looking for ore and wanted to get it as quick as possible.

Q. You found the same thing in shaft number 2 and shaft number 3 did you not—a vein of mineral?

A. Yes sir.

Q. And got assays, yet it would not pay to work it?

A. No sir.

Q. Did you move away and commence work other than in this discovery shaft because of any shadow of doubt of the validity of your discovery?

A. No sir; if we had had any doubt about it when we made this discovery in number 2 or number 3 we would have made our amended location.

Q. You were asked if at some time you didn't ship some ore that had been mined by the Ophir people?

A. Yes sir.

Q. Did you do it?

A. Yes sir.

Q. Yourself?

A. I had it shipped. I didn't load it myself; it was by my directions, and upon the advice of an attorney.

Q. You may state whether or not that was after the Secretary of the Interior's decision?

A. It was just shortly after we had gotten a decision from the Secretary of the Interior in our favor.

Q. You may state whether or not under those decisions of the Secretary of the Interior, their application for patent, their entry, was canceled?

A. It was.

115 Recross-examination by Mr. THOMAS:

Q. Was the discovery notice that you were just testifying about the one that was upon the original discovery shaft?

A. No sir.

Q. It was the one that was upon the discovery shaft that you sunk?
A. Yes sir, that Mr. Christie sunk.
Q. Well, it was sunk for you?
A. Yes sir.
Q. Who put that up?
A. I think Mr. Christie.
Q. When was it put up?
A. I don't know I am sure, but it was some time about April 20, a little later.
Q. About the time the location certificate was recorded?
A. I suppose that it preceded the record; it must have preceded the record of the location certificate.
Q. Who was named in that notice as the discoverer of the claim?
A. Joseph H. Beals.
Q. Anybody else?
A. No sir.
Q. What was the date of the discovery?
A. As I said before, from recollection of having read it I can't remember, but by reference to the location certificate it was April 20th.
Q. That is your best recollection by what appears there?
A. Yes sir.
Q. What was the name of the claim?
A. Tecumseh.
Q. Did it assume to give the number of feet in length in either direction?
A. I don't remember as to that.

116 P. J. LYNCH, being first duly sworn for the plaintiff, testified as follows:

Q. Where do you reside?
A. Victor.
Q. What is your occupation?
A. Miner.
Q. How long have you been mining?
A. About 17 years.
Q. Where?
A. In different parts of the State—in Summit county, in Dolores county, San Miguel county and El Paso county.
Q. Are you acquainted with the Tecumseh lode?
A. Yes sir.
Q. And the Ophir lode?
A. Yes sir; I am acquainted with the ground over there.
Q. When did you first become acquainted with them?
A. The first time that I was on the ground was some time in the fore part of April or the latter part of March, 1894; I went over there with my friend, Mr. Carr.
Q. For what purpose?
A. We just went over there to see what property he had over there; he was interested in a lease and bond over there.

Q. On the Tecumseh?
A. Yes sir. I had just come to the district in March.
Q. You came there in March 1894, to that particular district?
A. Yes sir.
Q. Did you at any time take an interest with Mr. Carr in that lease and bond?
A. I did, sir.
Q. When?
A. The latter part of the following June.
Q. June of 1894?
A. Yes sir; June of 1894.
Q. Were you interested at the time the discovery shaft known as shaft number 1 was sunk?
A. No sir.
Q. That shaft, then, had been sunk before you went there, had it?
A. Before I took an interest, yes; but not before I went
117 over to see the ground.
Q. What did you examine over there when you went the first time?
A. I didn't examine anything; I just went over there and was looking around; that was all.
Q. When did you first examine any of these properties?
A. I went over there afterwards—after the Tecumseh probably was down 20 feet, or a little over; I went down and saw that they had a vein there.
Q. A vein in the Tecumseh discovery shaft?
A. Yes sir.
Q. You say you saw they had a vein there at the depth of twenty feet?
A. I couldn't state the exact depth it was at that time; I could see the foot-wall.
Q. Has it been sunk deeper since?
A. It was sunk deeper, yes; after I was over there the second time it was sunk deeper.
Q. How deep is it now?
A. About 38 feet.
Q. How much drifting?
A. About 8 or 10 feet; I don't exactly remember.
Q. What was there shown, if anything, in that shaft by way of a discovery of a vein?
A. Right under the timbers there is a little crevice matter comes in there—some that looks like a vein that comes right in; I measured it the other day and it was about 12 or 13 feet from the collar of the shaft; that is right under the timbers. It is cribbed up down to there.
Q. Does it come in there?
A. Yes sir.
Q Does it continue down to the depth of the shaft?
A. Yes sir.
Q. Did you find anything there that resembles the walls of a vein?

A. Yes sir; there is a continuous seam from there down to the bottom.

Q. What would you say as to whether there is in that
118 shaft a well-defined crevice?

A. Yes sir.

Q. You say there is?

A. Yes sir.

Q. With two well-defined walls?

A. Yes sir.

Q. This crevice and these walls, are they there plainly visible now?

A. Yes sir, the foot-wall and the hanging wall are visible to the eye.

Q. What are those crevices filled with?

A. The one on the handing wall is a little looser than the foot-wall and probably a little soft matter; it is not very wide; probably not more than a quarter of an inch; probably in places it might be half an inch.

Q. What is the country rock there?

A. Porphyry.

Q. On both sides?

A. Yes sir.

Q. What is the general mass of the vein filling between those walls?

A. Principally porphyry and quartz in places.

Q. What do you know, if anything, in regard to this vein bearing mineral?

A. It has run a little, not very much; it never did.

Q. Have you had assays from it?

A. I never had any myself, no sir.

Q. Have you investigated it for the purpose of having assays made or not?

A. My friend, Mr. Carr, told me about the assays; I never had any myself.

Q. Did you ever examine the Ophir shaft?

A. Yes sir.

Q. When?

A. Some time in the latter part of June 1894.

Q. Was that the first time?

A. Yes sir.

Q. Were you familiar with the Ophir shaft from that time on until they resumed work in 1895?

A. Yes sir.

Q. Was there any work done from the time they examined it until the summer of 1895?

A. That I couldn't say; but I can say there was no work
119 done on it from the latter part of June until about the 1st of February, 1895; I was going back and forth there continuously until then.

Q. Up to February?

A. Up to February, 1895.

Q. Beyond that you don't know?
A. Beyond that I couldn't tell when they started in to work, but I saw them working some time in the fore part of July or the latter part of June.
Q. 1895?
A. 1895.
Q. At that time that you were familiar with the Ophir shaft, how deep was it?
A. I never measured it, but I climbed down the timbers and dropped into it several times, and I would judge it to be about 25 feet.
Q. And it remained at the same depth during the time that you knew it?
A. Yes sir.
Q. Did you examine that shaft to see whether there was any vein discovered in it?
A. Yes sir.
Q. What was the result?
A. I could not see any vein in it.
Q. Could you see any sign of any vein?
A. No sir; I know there was no vein in it at the depth of twenty-five feet.
Q. Were you there when this shaft number 2 was sunk?
A. Yes sir, I helped to sink it.
Q. And also number 3?
A. Yes sir.
Q. Did you make well-defined discoveries in those shafts?
A. Yes sir, there was a vein in each one of them.
Q. A well-defined fissure?
A. Yes sir.
Q. What are these veins in all these shafts—are they fissures?
A. Yes sir, they are all fissure veins.
Q. Did those veins in number 2 and number 3 bear mineral?
A. Yes sir, they are all gold mineral, but the grade is very
120 low; number 2 would only run two or three or four dollars.
Q. Did you make the assays?
A. I took the assays and sent them to an assayer, yes.

Defendants object.

Q. In your judgment, however, from the appearance of the veins, they bear mineral?
A. Yes sir.
Q. You would pronounce them mineral-bearing veins?
A. Yes sir.
Q. All three of them?
A. All three of them.
Q. That is, in shafts numbered 1, 2 and 3?
A. Yes sir.
Q. As I understand you, you discovered that they did not run high enough to meet your expectations, or what you were looking for?

A. No sir, they were not high enough to pay, neither one of them.
Q. Were you there when shaft number 4 was started?
A. No sir; I knew of it but I was not there.
Q. Were you still interested in the matter?
A. Yes sir.
Q. You were at that time, and you are still, are you not?
A. Yes sir.
Q. Interested in the Tecumseh property?
A. Yes sir.
Q. You knew the condition of the title of the Tecumseh?
A. Yes sir.
Q. You knew this Ophir claim and all that they were claiming?
A. Yes sir.
Q. You knew they had made application for a patent?
A. Yes sir.
Q. That it was adversed?
A. Yes sir.
Q. And their application canceled?
A. Yes sir.
Q. How were you working this property at the time you sunk shaft number 2 and 3; as an owner interested, or merely as an employé?

A. I was a part owner of the claim and Mr. Carr and I had
121 a bond and lease on the rest of the property.

Q. And you worked there, then, for yourself?
A. Yes sir.
Q. And did this work for yourself?
A. Yes sir.
Q. With your own hands?
A. Yes sir.
Q. You knew that if there was a discovery in the Ophir shaft you were throwing away your work and time, did you not?
A. Yes sir.

Defendants object, being leading.

Cross-examined by Mr. THOMAS:

Q. Mr. Lynch, what is the extent of your interest in the Tecumseh?
A. I own a one-eighth interest in it.
Q. When did you first go to Cripple Creek?
A. March, 1894.
Q. And you have been living there ever since?
A. In the district, yes; I have been living in Victor most of the time.
Q. Where are you engaged at present in working?
A. I am foreman of the Gold Coin mine in Victor.
Q. How long have you been on that property?
A. Since March, 1896.
Q. Then since March, 1896, you have not done any active work upon the Tecumseh?

A. No sir.
Q. You haven't been upon the ground a great deal, have you?
A. No sir.
Q. Did you take your interest with Mr. Carr before the discovery shaft of the Tecumseh was sunk or afterwards?
A. Afterwards.
Q. It was sunk to its present depth, was it?
A. Yes sir.
Q. When did you first examine the Tecumseh discovery?
A. I gave it a kind of an examination in the spring of 1894—just to look at it, that was all; I never examined it very thoroughly until last summer.

122 Q. What do you call crevice matter?
A. We call any matter between walls crevice matter.
Q. Any material that you find between walls of what?
A. Of a vein.
Q. Whether it is mineral-bearing or not?
A. Yes sir.
Q. Now you stated that right under the timbers you saw a lit-le crevice matter about 12 or 15 feet from the collar of the shaft?
A. Yes sir.
Q. What was the width of the crevice matter that you there saw?
A. On the hanging wall it must have been probably half an inch or quarter of an inch thick, the seam—the hanging-wall seam.
Q. What do you mean by hanging wall seam?
A. The cleavage where the vein and the country rock divides.
Q. Then what you call crevice matter there is something that divides the vein matter from the wall?
A. Yes sir.
Q. What is the rest of the vein matter?
A. It is principally porphyry.
Q. What is the width of your vein where it first appears in the shaft?
A. Down about twelve or fourteen feet you notice it probably ten or fifteen inches wide there.
Q. So that, when it first comes in it is from ten to fifteen inches wide?
A. Yes sir.
Q. Is that on the west end of the shaft?
A. Yes sir.
Q. What is the rest of the shaft sunk in at that point?
A. It is sunk in porphyry.
Q. Is it sunk in the foot-wall?
A. No sir, we hadn't come yet to the foot-wall.
Q. How long is your shaft?
A. The shaft must be eight or nine feet wide under the timbers there.

123 Q. Then if your vein is 15 inches wide in the west part, the rest of the shaft must be sunk in the foot-wall, mustn't it?
A. No sir.
Q. Is it sunk in the hanging wall?

A. The vein comes this way and we cut right down through it in this way, and got the hanging wall, and the country rock was there and we have got to go still deeper in order to get to the foot-walls.

Q. You say the vein is 15 inches wide; what is the dip of it?

A. It dips to the west.

Q. How much?

A. I should say probably a foot in 5 or 6 feet.

Q. Do you say that under those circumstances with the vein nearly 15 inches wide, that the rest of the shaft is not in the foot-wall?

A. The part of the vein that is exposed up there is what I mean.

Q. The only part of it exposed is fifteen inches wide; what is the balance of the shaft in?

A. It is in porphyry, I guess.

Q. What is the country rock up there?

A. Porphyry.

Q. How far down can you follow this vein that you say is fifteen inches wide, after it first appears in the shaft?

A. That 15-inch vein, there is a hanging wall seam and vein about fifteen inches, or probably twenty inches from it, which would go all the way down the shaft pretty near.

Q. Have you got more than one vein in that shaft?

A. It is one vein; we call it one vein, but in mostly all veins that ever I saw you see parallel veins in them.

Q. That is veins within veins?

A. Veins within veins.

Q. How many veins have you got there within your principal vein?

A. I should say there is three or four.

Q. Do they all dip to the west?

A. Yes sir.

124 Q. How far apart at its widest place do you put the hanging and foot-wall of your vein in that shaft?

A. It is about between 7 and 8 feet—probably 8 feet wide.

Q. Where does it appear that width in the shaft?

A. Where the foot-wall first comes in about twenty-five feet down.

Q. Doesn't the foot-wall come in until you get twenty-five feet down from the collar, or about that distance?

A. It may come in, I believe it does, probably a little higher up; but the perpendicular wall or east wall of the shaft would not strike it until probably twenty-five feet.

Q. Does the foot-wall continue in the shaft from the point where it first appears down to the bottom of the shaft?

A. Nearly so; it is cut by a drift down to the bottom.

Q. What do you understand by the term vein or lode?

A. A fissure vein, you mean?

Q. I asked the term generally?

A. A vein is mineralized matter between walls.

Q. That is your general definition of a vein?

A. Yes sir.
Q. A mass of mineralized matter between walls?
A. Yes sir.
Q. Must this mineralized matter differ from the walls, in your judgment?
A. Not always.
Q. It may be the same thing?
A. Yes sir; I have seen the same matter in the vein that is in the walls.
Q. And you have seen it right there in Cripple Creek, too, haven't you?
A. Yes sir.
Q. And right in this shaft?
A. Yes sir, and in other shafts.
Q. When you say that walls are included in your definition of a vein, do you mean lines of division or walls that can be seen?
A. I mean lines or walls that can be seen, yes; I would
125 not consider it a vein unless I would see walls.
Q. If you cannot see the walls but must use some other method of determining their existence, that would not be a vein, in your judgment?
A. No sir.
Q. Isn't it a fact that in that district the filling of the veins is frequently of a porphyritic nature, so like the walls that you cannot tell them apart by the eye?
A. Yes sir, sometimes.
Q. Isn't it a fact that this likeness is so great that experienced miners frequently get off their vein into the country rock by reason of that fact?
A. If they have got a vein with walls, an experienced miner will hardly ever get off his vein.
Q. You say if they have got walls an experienced miner will hardly ever get off his vein?
A. Yes sir.
Q. By that you mean, do you not, walls that can be seen?
A. Yes sir, walls that can be seen.
Q. Isn't it a fact that in that district owing to the resemblance between country rock and vein filling that it is a matter of common occurrence for miners to get off their pay ore?
A. I never saw it in my experience.
Q. Did you ever hear of it?
A. I might have heard of it, yes.
Q. Don't you know that it has been the case on Raven Hill a number of times?
A. I never saw it.
Q. In the Raven mine and in the Elkton mine?
A. I never saw it.
Q. You never heard of it, neither, did you?
A. I might have heard of it, yes.
Q. Don't you know that you have heard of it?
A. I am not sure whether I have or not.

Q. If you break a piece of your vein filling from the vein
126 in the discovery shaft of the Tecumseh and a piece of what you call wall rock and lay them side by side, you couldn't tell them apart, could you?

A. Not very easily.

Q. Not unless you had selected them yourself?

A. No sir.

Q. How would you determine which was vein matter and which was wall, under those circumstances?

A. I couldn't determine unless I took it out of the vein myself, or unless it was some quartz.

Q. Or saw it taken out?

A. Yes; or unless it was a part of the quartz that was in the vein.

Q. Take it in a vein that the vein filling of which bears some resemblance to the wall, and how are you going to tell them apart?

A. I have never worked much in those kinds of veins; the veins that I have worked in I can easily tell the difference between the country rock, all that I worked in.

Q. You never worked in this shaft?

A. No sir.

Q. Is there any method of determining the distinction in the cases like the one I have called your attention to where the vein filling and the wall rock has the same appearance to the eye except by assay?

A. Not unless there should be some quartz through it.

Q. I understand; but I say where porphyry filling and the wall rock are practically the same to the eye, is there any way except by assay of telling the difference?

A. No sir, not that I know of.

Q. How many cracks or fissures are there in that shaft running up and down?

A. There are 3 or 4.

Q. Do they begin about the same distance below the collar and run down to the bottom of the shaft?

A. No sir; the hanging side of the wall comes in first, of course, and cut through it; and then as you go down you cut the others as you gain greater depth.

127 Q. Those are nearly vertical with a slight dip to the west, aren't they?

A. Yes sir.

Q. What is their strike?

A. What do you mean?

Q. What is the strike of the vein, as near as you can determine from what is shown in the shaft? You know what the strike of a vein is?

A. Yes sir; it is nearly north and south.

Q. What do you understand by the strike of a vein?

A. The direction in which it runs.

Q. The direction in which it runs across the country?

A. Yes sir, across the country.

Q. Not down?

A. No sir, I would call that the dip.
Q. Do you see any cracks or fissures in that shaft that are horizontal?
A. Yes sir.
Q. How many?
A. There is about three or four very plain ones.
Q. Just about as persistent as the ones that are up and down?
A. Yes sir, very near as plain.
Q. Just about as well defined?
A. Yes sir, and I can see those in any vein.
Q. You can see the cracks up and down too, in any vein, and you can see them in the country rock most anywhere where you sink a shaft?
A. Cracks up and down?
Q. Yes sir?
A. Not regular ones.
Q. What do you call a regular one?
A. That goes regularly through the rock.
Q. For any given distance?
A. Yes sir.
Q. The ones that run horizontally are just as regular as the ones that run up and down in that shaft?
A. Nearly so.
Q. They are veins, too, are they not?
128 A. No, I never considered them veins.
Q. Why not; they run through the country regularly, don't they?
A. I should say they do so far as exposed.
Q. They look like the others to the eye?
A. Yes sir.
Q. Have the same kind of material, haven't they?
A. Nearly the same, yes sir.
Q. Why, then, do you say they are not an additional set of veins that you have opened in that shaft?
A. Because they are not the veins that we usually find in that district.
Q. That is the reason?
A. And for that reason I would not consider them veins.
Q. They are not veins usually found?
A. No sir.
Q. And not being veins usually found there you would not call them veins at all?
A. Not in that district.
Q. Is there any other reason why you would not call them veins?
A. No sir.
Q. Do you know what joint planes of a porphyry rock mean?
A. No sir.
Q. Do you know what the natural cleavages of porphyry rock are?
A. I should say where one layer comes on another.

Q. It is a sort of fracture that the miners can recognize and know belongs to the porphyry or igneous rock or eruptive rock?

A. Yes sir.

Q. Isn't it a fact that what you found in that shaft are the cracks or fissures or cleavages that are natural and characteristic of that rock?

A. No sir.

Q. Did you make any test or attempt to make any test before you bought into that property or afterwards by assay or analysis
129 of the vein material in the vein in that shaft?

A. I did not, myself, no sir.

Q. You did not yourself either then or at any other time, did you?

A. No sir, I didn't consider it necessary; I had full confidence in my partner.

Q. You were satisfied from the appearance to the eye that it was all right?

A. Yes sir.

Q. How long had you been in the camp before you went and examined it particularly?

A. I had been there only a few weeks when I went over first; I went over with my friend Mr. Carr.

Q. How many mines in that camp had you examined; how much had you familiarized yourself with the vein formation there before you determined that there was a vein in that shaft?

A. None.

Q. Where had you mined before?

A. I had mined in Summit county, Dolores county and San Miguel county.

Q. In all those counties, or in any one of those counties, did you find the same geological conditions that you found here?

A. No sir; the fissure veins are nearly the same in every country.

Q. The fissure veins you have mentioned were veins filled with silver-bearing ore, were they not?

A. Silver and gold.

Q. Principally silver?

A. Yes sir, principally silver.

Q. And to some extent in limestone and granite?

A. Yes sir, different kinds of rock.

Q. As a matter of fact, there are no veins of porphyry in Rico are there?

A. No sir, I don't remember any.

Q. Nor in San Miguel?

A. I can't remember, no sir.

Q. Nor in Summit?

A. I couldn't remember any.

Q. Therefore, the vein formations in porphyry rock were
130 matters that you were not familiar with at the time that you determined that there was a vein there?

A. No sir, except that I know a fissure or crack in the rock is the same anywhere.

Q. That is, you know a crack in a rock when you see it?
A. Yes, a fissure.
Q. Do you call all cracks in the rocks fissure veins?
A. Yes sir, if they are regular.
Q. Do you call them fissure veins whether they yield any amount of precious metal or not?
A. If they yield any at all I would consider them mineral-bearing veins.
Q. Do you consider a fissure and a fissure vein the same thing?
A. A fissure would have no filling in it at all.
Q. And a fissure may have filling in it that does not carry any sort of metal?
A. Sometimes, I dare say.
Q. What do you understand by a dike?
A. A dike is a fissure, I dare say, filled with rock that does not bear.
Q. Do you think a dike and a vein are the same thing?
A. I would consider them the same thing but one carries ore and the other does not.
Q. One is barren and the other is not?
A. Yes sir.
Q. Would you call them both fissure veins?
A. I would call them both fissures.
Q. You would locate one just as quick as the other?
A. I would locate either of them and stay with them until I found out whether they carried any ore or not.
Q. What is your definition of a lode? Is there any difference in your mind between a vein and a lode?
A. A lode is a mineral-bearing rock in place.
Q. Would you call a barren fissure a lode?
A. No sir.
131 Q. Would you call the formation in the Tecumseh shaft a lode?
A. Yes sir.
Q. Why?
A. Because it carried some values.
Q. How do you know?
A. Because my friend had assayed it and told me so.
Q. Then you only know from hearsay?
A. Yes sir.
Q. You never made any tests?
A. No sir; I had full confidence in my partner.
Q. I understand; but there is nothing to the eye that could inform you except that the cracks were there?
A. The cracks were there and the quartz here and there.
Q. Did you see any quartz between the cracks?
A. Yes sir.
Q. What proportion of quartz was there between these cracks to the porphyry that was between them?
A. Very small.

Q. How much; you have got about eight feet between walls; how much of that is quartz?

A. It would be very hard telling unless you would break the ground; it was mixed up considerably.

Q. At what portions of that shaft did you see quartz; tell the jury where they can find quartz in that vein below the collar of the shaft?

A. They can find it mostly from under the timbers in different places from there down to the bottom.

Q. On which side of the vein—the hanging-wall side or the foot-wall side?

A. They can find some on the hanging-wall side and some in the center of the vein where there is a perpendicular seam, and they can find some on the foot-wall.

Q. Is this quartz that you say can be found from about the lower portion of the timbers to the bottom of the shaft continuous?

A. Nearly so, yes sir.

Q. What is the thickness of the quartz that is continuous
132 from there down?

A. It is continuous in the rock; it is a massive rock and when you break it open you find the rock all quartz right through the rock.

Q. Was that a quartz seam that can be defined and followed from the point you speak of down to the bottom of the shaft?

A. Yes sir, there is a small seam on the hanging-wall side—it is different from the other part of the rock; it is harder and browner.

Q. It looks browner and harder?

A. Yes sir.

Q. How thick is it? What is the average thickness of it?

A. It might be half an inch; in places an inch thick.

Q. From a half inch to an inch thick?

A. Probably thicker.

Q. Do you find any other seam of quartz in that vein?

A. Yes sir.

Q. Where?

A. In the other seams that are running up and down; they are different from the other parts of the vein.

Q. In what respect is quartz different from the rest of the vein filling except that you say it is harder?

A. It is harder and different colored.

Q. Is it crystallized in a different way?

A. Some of it is crystal-ized in a different way, yes.

Q. Have you any pieces of it here?

A. No sir.

Q. When did you examine that shaft last?

A. I was down there the first of the month.

Q. Do you know anything about a shot having been put in that shaft within the last month or sixty days by the Tecumseh people?

A. Yes sir; my friend Mr. Carr told me there was one put in there; I saw where it was put in there.

Q. Did you examine that?

A. Yes sir.

Q. Where was it put in?

133 A. It must be about twenty feet down from collar.

Q. On which side or end of the shaft?

A. It is on the west side or the hanging wall.

Q. Put right in the hanging wall?

A. No, it was in the vein.

Q. I thought you said that the west end of the shaft from the time it struck the hanging wall followed the hanging wall down to the bottom?

A. Yes sir, I say it is in the vein but on the hanging-wall side of the shaft.

Q. Is it directly to the west end of the shaft or is it in the north or south side of the shaft?

A. It is in the northwest side of the shaft.

Q. What was the purpose of putting it in there, if you know?

A. That I don't know.

Q. Does it show up anything that did not otherwise appear in the shaft? That is, any new condition?

A. No, only that it defines the walls more clearly.

Q. How much rock do you think was knocked out by that shot, a ton?

A. No, probably two hundred pounds.

Q. Just one shot?

A. Yes sir.

Q. There is a drift or cross-cut that runs fro n the bottom of that shaft, isn't there, easterly?

A. Yes sir.

Q. About how far?

A. About eight or ten feet.

Q. Drifting through the foot-wall?

A. Yes sir.

Q. The face of that cross-cut exposes a clean, smooth surface some five or six feet east of the bottom of the shaft, don't it, and where that is is just like what you call your foot-wall?

A. Yes sir.

Q. Is that another vein there?

A. It might be.

Q. Well, is it?

134 A. If that wall cut clear up to the surface or up to the wash I would consider it a vein, yes.

Q. Would you consider it a different vein or the foot-wall of the vein in the shaft?

A. I would still call it the same vein.

Q. That would make it how wide at the bottom from the west end of the shaft at the bottom to the east breast of the cross-cut?

A. That would be about sixteen feet wide, probably, or seventeen.

Q. If that cross-cut were driven four or five feet further and struck another smooth face, what would you call that, a separate vein or the foot-wall of the vein that the shaft was sunk in?

A. No sir, I would call it the same vein.

Q. And you would continue on indefinitely, wouldn't you, according as you would find these different faces extending to the east?

A. If they carried ore I would; I have seen veins like that.

Q. Does this one carry any ore at the breast of the cross-cut?

A. I never tried it.

Q. You don't know whether it does or not?

A. The probabilities is that it does not because it is not driven any further.

Q. You think that if it did the cross-cut would have been driven further or that the drifts would have been extended north and south, don't you?

A. Probably, yes.

Q. Do you know when that work was done?

A. It was done some time before 1894 in June.

Q. What year?

A. 1894

Q. It was there when you first examined the shaft, wasn't it?

A. Yes sir.

Q. At the time you made this examination did you examine the so-called old shaft of the Tecumseh, westerly?

A. I just looked into it.

135 Q. You didn't go down into it?

A. No sir, it was too deep; I couldn't get down without a ladder.

Q. How far down could you see in it?

A. I could see, I guess, probably thirty-five or forty feet.

Q. Could a man see a crevice about thirteen feet down big enough for a man to stick his leg in?

A. If I did I can't remember.

Q. Your principal purpose was to examine the other shaft, then?

A. Yes sir.

Q. And the attention you paid to that shaft was merely casual?

A. That is all; I passed over the dump.

Q. When did you first examine the Ophir discovery shaft or what was told to you to be the Ophir discovery shaft?

A. Some time in the latter part of June, 1894.

Q. About the same time that you examined the other?

A. Yes sir, about the same time.

Q. Who was with you?

A. Mr. Carr.

Q. The same gentleman that was with you when you went to the discovery shaft of the Tecumseh?

A. Yes sir.

Q. Did you go down into the shaft at that time?

A. Yes sir.

Q. Did Mr. Carr go in also?

A. No sir.

Q. Stayed on the surface?

A. Yes sir.

Q. How did you get down?
A. I climbed down the timbers and then dropped from the bottom of the timbers into the shaft.
Q. How far down did the timbers extend?
A. They extended down 16 feet.
Q. How far below that did you have to drop?
A. I should judge about nine or ten feet.
Q. Was there any snow in the bottom of the shaft?
136 A. There was a little cone in the center of the shaft; that was all.
Q. About how deep was it at its deepest place?
A. The snow?
Q. The snow.
A. At this time I couldn't remember; it may be a foot deep.
Q. Any waste or debris in the bottom of the shaft?
A. There was a little, I guess.
Q. How much, would you say?
A. That I could not determine at this time.
Q. Did you measure the shaft at that time?
A. No, sir, I never measured.
Q. You never measured it at any time?
A. No sir.
Q. In your former testimony didn't you state what the depth of the shaft was at that time?
A. If I am not mistaken, I said it must be about twenty-five feet.
Q. How long a time did you stay in there?
A. 10 or 15 minutes, probably; more or less.
Q. Did you come to the conclusion then that there was no vein in there?
A. I did, sir, then.
Q. Why did you come to that conclusion?
A. From my examination of it, and also from the testimony of Mr. Cone before the land office.
Q. Had you read the testimony of Mr. Cone at that time?
A. I had partly read it and some of it was read to me by my friend Mr. Carr.
Q. He had a copy of it, did he?
A. I believe so.
Q. Did you read it at the shaft or before you went there?
A. Before I went there.
Q. When you read that where were you?
A. I guess in my room.
Q. Did you read it all?
A. All Mr. Cone's testimony?
Q. Yes?
A. I believe I did.
137 Q. Then you read about some pieces of rock he took from there and had assayed?
A. Yes sir, I remember that.
Q. You read about some of the assays?
A. Yes sir.

Q. Were you satisfied that there was not any vein there by Mr. Cone's testimony at the land office or by your own examination?

A. By my own examination; I wanted to make sure whether he was right or not.

Q. You didn't know but what he might be mistaken?

A. I didn't know but what he might be mistaken.

Q. And when you went and examined the shaft yourself you agreed with Mr. Cone, perfectly?

A. Yes sir.

Q. Did you break any of the rock away for the purpose of assaying it to see if Mr. Cone's assays were correct?

A. No sir, I didn't see any place there that was worth while breaking rock off.

Q. And yet you say that the veins belonging in that country are so like the porphyry in many places that you can't tell them apart by the eye?

A. Yes sir; but there is this difference—that there is always a seam which will determine the difference or the place where the vein comes in.

Q. Always?

A. Yes sir; every place I have seen.

Q. And you knew that to be always the case when you examined it there?

A. Yes sir; I didn't see any difference there at all.

Q. And you say now that that is the rule in that camp, do you?

A. Yes sir.

Q. That there is always a seam or line of division between the ore and country rock?

A. Every place I ever seen there.

Q. How many have you seen?

A. Half a dozen different places.

Q. Did you see any seams in that shaft?

138 A. Yes sir; there is cracks there that would be in all rock, cracks running every way.

Q. And some of these cracks were up and down and extended quite a distance in the shaft?

A. Some were up and down and every way, but didn't extend regularly any way.

Q. Wasn't there at that time one seam or two seams, as you call them, extending to the bottom of the shaft, running up underneath the timbers?

A. I never saw it.

Q. You never saw it?

A. No.

Q. You would have seen it if it had been there, wouldn't you?

A. I would, sir.

Q. There was nothing of that sort?

A. No sir.

Q. Then you took no samples and made no assays?

A. No sir.

Q. You stayed there ten or fifteen minutes?

A. Yes sir.
Q. And come out convinced that there was no vein there?
A. Yes sir.
Q. You were thoroughly convinced of it?
A. Yes sir.
Q. But you went there again in a few days, didn't you?
A. Yes sir.
Q. Why?
A. Well, a man will go up into a place just to make himself doubly sure.
Q. You wanted to make conviction doubly sure?
A. Yes sir.
Q. So you went up again and had your previous convictions confirmed?
A. Yes sir.
Q. That made you absolutely positive?
A. Yes sir.
Q. Then you went there again in a few days, didn't you?
A. Yes sir.
Q. What did you go the third time for?
A. The same purpose, probably.
Q. Were you still doubting?
139 A. I was not doubting, no sir; I went down there just to see it over and over again.
Q. Did you want to assure your convictions a second time?
A. Yes sir.
Q. How long did you stay there then?
A. Not very long.
Q. But this confirmed you, didn't it, absolutely?
A. I guess so.
Q. Then you went again in a few days, didn't you?
A. I probably went five or six times in all.
Q. Why did you repeat these things when you were so convinced first?
A. Because, as I said, a man in putting money into a place, he wants to confirm his convictions probably as often as he can.
Q. Did you go and examine it every time you were called on for an assessment?
A. No.
Q. To see whether there was any change there or not?
A. No sir.
Q. As a matter of fact, didn't you suspect, or were you not uncertain as to whether there was any mineral deposit in that shaft or not, in consequence of which you went there so frequently?
A. No sir; I never saw any sign that there was a vein there.
Q. Did Mr. Carr go with you each of the times that you went to refresh yourself?
A. No sir.
Q. Did you go alone?
A. Yes sir.
Q. What times would you go—what times of the day?

A. It was mostly after we would eat our lunch; we would eat our lunch right under a tree near that shaft and I would drop right down in there.

Q. Every time you ate your lunch you dropped down the shaft?

140 A. Not every time; only two or three times.

Q. You knew where the Minnehaha shaft was, didn't you?

A. Yes sir.

Q. And you knew that that had exposed a vein of mineral?

A. Yes sir.

Q. And sighting from that you could determine that the Ophir shaft was pretty near on a line with it?

A. When we sighted from that first we got forty or fifty feet out of line because we started a shaft about forty or fifty feet east of the Minnehaha in order to catch that vein.

Q. That was shaft number 2?

A. That was shaft number 2, and sunk it down over forty feet and drifted.

Q. You went back to the Minnehaha shaft then to reassure yourself as to that point, didn't you?

A. Yes sir.

Q. And the more you sighted over that the more the Ophir shaft came into view, didn't it?

A. Yes sir.

Q. Wasn't that one of the reasons that actuated you in making these successive examinations of the Ophir shaft?

A. Not that I remember. I think I made all of those examinations quite a long time before I started shaft number 3.

Q. Did you help to sink shaft number 2 personally?

A. Yes sir.

Q. And shaft number 3?

A. Yes sir.

Q. When did you begin shaft number 3?

A. We started the day after Labor day, in September, 1894.

Q. That would be Tuesday after the first Monday in September?

A. Yes sir.

Q. Who helped you sink it?

A. Mr. Carr and my brother.

Q. Is your brother interested with you?

A. No sir.

141 Q. He was there simply helping you sink the shaft?

A. Yes sir.

Q. How far south of the Ophir shaft was number 3 shaft?

A. It was 75 or a 100 feet south of it.

Q. Approximately that distance?

A. Yes; I couldn't tell exactly.

Q. You sunk it forty feet deep and drifted north?

A. Yes sir.

Q. For thirty-five or thirty-six feet?

A. Yes sir.

Q. What did you stop for?

A. We were getting assays all of the way in the shaft and in the drift but not anything that would pay us—not enough to pay.

Q. Was that the only reason you stopped?

A. No; we thought, as is generally the case in that district, the ore ran in chutes; in veins some part of veins are absolutely barren and then you move up or down the hill and you will get a place where there is a chute of ore, and we thought we would move up the hill further to see if we could get an ore chute; we knew that there was ore somewhere near us on account of the assays we were getting, sometimes as high as twenty-five dollars.

Q. You waited fifteen months before you moved up the hill?

A. No sir, we came out of there some time in November and we started three trenches up the hill.

Q. Did you begin shaft number 4 until December 1895?

A. No sir.

Q. So that, with the exception of the trenches, of which you speak you did not move up the hill and sink a shaft for fifteen months, did you?

A. No sir.

Q. Isn't it a fact that you stopped drifting north from your number 3 shaft because the line of the drift would bring you right under the Ophir shaft?

A. No sir; our reason for stopping was because we had got to the end of our resources; we didn't have another dollar.

142 Q. Did you then organize the Tecumseh Company?

A. Not for over a year afterwards.

Q. Did you organize the Tecumseh Company to continue work until the Ophir had struck pay ore?

A. No sir.

Q. Then between the time that your resources were exhausted when the drift was sunk to the time you organized the Tecumseh Company the Ophir people had begun work?

A. Yes sir, some.

Q. Sunk down and had begun to take out pay ore, hadn't they?

A. So I heard.

Q. And shipped some?

A. That was what I heard; I don't know myself.

Q. Then you organized the company?

A. Yes sir.

Q. And sold stock enough, didn't you, to sink the other shaft?

A. Yes sir.

Q. And that shaft was begun north of the Ophir shaft for what reason?

A. I dare say a good deal of the reason was because we knew the Ophir people had ore and we wanted to get further up the hill, and we had come to the conclusion from our number 3 investigation that the ore chute probably was further up the hill.

Q. And that is where the work has been done upon your Tecumseh claim since that time, isn't it?

A. Yes sir.

Q. Upon that shaft and workings connected with it?

A. Yes sir.

Q. Do you remember about the time you commenced that shaft the Ophir people had some pay ore on their dump?

A. Yes sir.

Q. What became of it?

A. I am pretty sure that Mr. Carr shipped it; I didn't see him do it, but I am pretty sure he did do it.

Q. He shipped it and sold it?

A. Yes sir, with the advice of his attorney.

143 Q. And devoted the proceeds of it to the Tecumseh people?

A. Yes, sinking the shaft.

Q. Do you remember how much of it there was?

A. No sir, I have no idea.

Q. Did you do any work in number 4 shaft?

A. Personally?

Q. Yes sir.

A. No sir.

Q. The work that was done there after the organization of the company, then, was not done by yourself directly or indirectly?

A. No sir, except as a member of the company.

Q. Are you an officer of the company?

A. Yes sir.

Q. There were two companies, weren't there? A leasing company and the Tecumseh Gold Mining Company—or was there?

A. No sir.

Q. Only one?

A. One.

Q. Did you, between the time of the sinking of number 3 shaft and the commencement of work on number 4 shaft, make any further examination of the Ophir shaft?

A. No sir.

Q. When was the last time before the commencement of this suit that you examined the Ophir shaft?

A. The last time I examined it was some time in May 1897—last year.

Q. That was after this suit began; I mean between the time that you first examined it and before the suit was begun.

A. I couldn't say when I did examine it; it was some time in 1894.

Q. Did you examine it at all until May 1897?

A. No sir.

Q. And before work was resumed on it in 1895?

A. No sir.

Q. Then in May 1897 before the first trial you went and examined it again?

A. Yes sir.

Q. Did you find it in the same condition that it was when you examined it before?

144 A. Yes sir; that is to say as far as it had been sunk down, as far as I could see, when I noticed it in 1894.

Q. From the point where you estimate the bottom to have been when you last examined it, the conditions were precisely the same?
A. Yes sir, as I could see.
Q. How was it from that point below?
A. After they sunk about 8 or 9 feet they struck a vein.
Q. You mean 8 or 9 feet from the bottom as it was when you saw it in 1894?
A. Yes, sir; the vein came in from the northeast corner into the shaft.
Q. It came in from the northeast and dipping in what direction?
A. Dipping to the west.
Q. What was the width of it?
A. It could not be more than about two and a half inches wide.
Q. What were the walls of that two or two and a half inch vein?
A. They were quartz—porphyritic quartz.
Q. The ordinary country rock?
A. No sir, they were a little different; they were harder and browner than the ordinary rock around it,
Q. The walls right at this two and a half inch vein were harder and browner and they were more quartzy, were they not?
A. Yes sir.
Q. Were they not a part of the vein?
A. The walls around it?
Q. Yes.
A. I could not call that any part of the vein until I came to the wall.
Q. Do you know whether they carried any appreciable quantities of gold, what you call walls?
A. I never assayed any of it.
Q. As a matter of fact you had gone almost entirely upon your idea and by what Mr. Carr told you for the purpose of determining those questions?
A. Previously I did.
145 Q. Did you see at or near the discovery shaft of the Tecumseh when you first went there in June 1894 any notice signed by Come or Robison, or either of them, warning people against working on the Ophir claim?
A. I can't remember that I ever saw it but I heard that it was there.
Q. You heard that from whom?
A. From the man who had sunk it.
Q. Mr. Christie?
A. Yes sir.
Q. You knew all of the time that this work was being done, did you not—that these premises were claimed adversely?
A. Yes sir.
Q. You knew that whatever work you were doing there was done in the face of an adverse claim to the property?
A. Yes sir.
Q. Did you help locate the Whale?
A. Yes sir.

Q. You were one of its locators?
A. Yes sir.
Q. And one of the persons who sold it?
A. Yes sir.
Q. What did you get for it when you sold it?

Plaintiff objects; objection sustained, defendant excepting.

Q. Is the Whale discovery shaft within the boundaries of the Tecumseh?
A. No sir.
Q. Is it on the same vein that the Tecumseh shafts number 3 and 4 are on?
A. No sir.
Q. Is it on the same vein that the Minnehaha and shaft number 2 are on?
A. It is not on the vein I am almost sure that the Minnehaha is on, but I think it is on the same vein that our shaft number 2 is sunk on.
Q. You think that is a different vein from the Minnehaha?
A. I am sure of it, because it dips to the east and the other dips to the west.
146 Q. When was that work done?
A. The Whale work?
Q. The Whale discovery shaft?
A. It was done in the last days of June.
Q. 1894?
A. 1894.
Q. By yourself and Mr. Carr?
A. By myself and Mr. Carr, yes sir.
Q. And your brother?
A. No, he was not there then.
Q. Was there anything that was disclosed by that shaft that caused you to sink shaft number 3?
A. No sir.
Q. Did you know who the parties were that claimed to be the owners of this territory at the time that you bought your interest?
A. I knew of them by name.
Q. You knew that they also owned some property there and were working it, didn't you—the Doctor and Chief?
A. Yes sir.
Q. And you were very anxious to inform yourself, were you not, as to whether their claim was well founded, and for that reason you read Mr. Cone's testimony and examined the shaft?
A. Yes sir.
Q. Did you go and try to get any information from Mr. Cone himself or from Mr. Robinson?
A. No sir.
Q. Why not?
A. I didn't consider it necessary.
Q. You didn't want to expend your money there upon other people's property, did you, not knowingly?

A. Well, I read his testimony and I examined the property and I knew enough about mining law to know that he had absolutely no claim on the property.

Q. That was the conclusion you came to?

A. That was the conclusion I came to.

Q. He was where you could have seen him every day, wasn't he?

A. I couldn't have seen him every day, no.

Q. You could have seen him?

A. If I had made an effort, yes, I could have seen him.

147 Q. But you didn't do it?

A. No sir.

Q. You simply took the chances with reference to the character of the claim and your estimation of what the law was?

A. Yes sir.

Q. What was the depth of the wash at the Tecumseh discovery shaft?

A. That I don't know.

Q. What is your best judgment?

A. It is probably 8 or 9 feet.

Q. What is the depth of the wash at the Ophir discovery shaft?

A That I don't know either; they were both timbered up when I saw them.

Q. What do you understand by the term "rock in place"?

A. Rock in place is where it comes so that you have to shoot it out; that is, providing it ain't big boulders.

Q. In other words, rock in place and shooting ground conveys the same impression to your mind?

A. Yes sir.

Q. What do you mean by shooting ground—rock that has to be blasted for removal?

A. Yes sir.

Q. Did you help mark the boundaries of the Tecumseh?

A. No sir.

Redirect examination:

Q. You say that you had read the testimony of Mr. Cone, one of these defendants, that he gave on the hearing at the land office?

A. Yes sir, I read a part of it—all of Mr. Cone's testimony, yes.

Q. Did Mr. Cone ever give you any notice that he was in any way mistaken as to the testimony that he had given?

A. No sir.

Q. If he testified on that hearing that he had no vein did he ever give you any notice afterwards to the contrary?

A. No sir.

Q. You were asked if there was not some ore shipped that was mined there by the Ophir people?

A. Yes sir.

148 Q. When was that shipped, if at all?

A. It was shipped some time in the early spring of 1896.

Q. Wasn't that after the Secretary of the Interior had decided that case?

A. Yes sir; we just started to work and the Secretary of the Interior had decided the case in our favor.

Q. And you say that was done upon the advice of an attorney?

A. Yes sir, Mr. Ingersoll of Denver.

Q. That is to say it was taken from the Tecumseh ground through the Ophir shaft under claim of right?

A. Yes sir.

Q. You were asked about several visits to the Ophir shaft and your reasons for those visits?

A. Yes sir.

Q. I will ask you to state whether or not one of those reasons was not that you were watching that property to see if any more work was done?

A. You mean by visiting, going down into the shaft?

Q. Yes?

A. I would not have to go into the shaft to be able to tell that.

Q. Didn't you go there occasionally for the purpose of watching the shaft and being there would simply go down in the shaft and look around in the shaft and examine it and re-examine it?

A. I don't know that that was altogether the reason; I was working right around the shaft there all of the time and I could easily tell whether they were working there or not.

Q. What are the veins on Raven hill—what kind of veins are they?

A. They are fissure veins, all of them that I have seen.

Q. Do you know of any veins on that hill that are not fissure veins?

A. No, I don't know of any.

Q. Are they not what is known as true fissure veins?

A. Yes sir.

Q. You say that there were some horizontal joints or cracks in this discovery shaft of the Tecumseh?

A. Yes sir.

149 Q. Do you not find those in nearly all of the mines on that hill?

A. Yes sir, I have seen them in some of the biggest mines in the Cripple Creek district right in a big vein.

Q. Do you find them in the mine that you are foreman of now?

A. Yes sir.

Q. That is the Gold Coin?

A. Yes sir.

Q. Those are generally called joints, are they?

A. We call them seams.

Q. Then again you find vertical cracks?

A. Yes sir; when the vein is very large; I know in the Gold Coin vein there are from two to four parallel veins within the vein.

Q. Is it not a fact that almost universally the porphyry on that hill is broken up more or less by these horizontal cracks and vertical cracks called joints?

A. Yes sir, I should say they are.

Q. In other words, the porphyry for any great distance is not an absolutely unbroken, solid substance?

A. No sir, no rock is.

Q. But is broken up by these joints running in almost every direction?

A. Yes sir.

Q. As I understand you, when one of these cracks becomes distinct and regular and opens out larger than usual, you call it a crevice, or a vein, if it happens to be filled with mineral?

A. I call it a vein when it starts and cuts right through the horizontal seams and cuts right through down and keeps on down as far as you investigate, I call it a vein.

Q. That indicates that that is a different fissure and undoubtedly created by a different process from these other joints, don't it?

A. Yes sir.

Q. And when that becomes regular, so that you can follow it, without any indication of a change, you call it a fissure?

150 A. Yes sir.

Q. That is the kind of veins, if they bear mineral, that you pronounce veins on Raven hill?

A. Yes sir, or in any other place for that matter.

Q. When you find one of those fissures on Raven hill, I am speaking of now, don't you consider it very likely that very close to it, on one side or the other, you will find another?

A. Of course you can't tell until you break through the ground; it may be so, yes.

Q. In other words, isn't it a prevailing condition in all of the mines on Raven hill, that there are parallel fissures that belong to the same vein?

A. That I don't know; I have not worked enough on Raven hill to be able to say so.

Q. How is it in Gold Coin?

A. In the Gold Coin it is so; there are several parallel fissures there within the vein.

Q. How wide is the vein in the Gold Coin?

A. It varies all the way from a foot to twenty feet.

Q. How many of those parallel fissures do you find in that vein?

A. Two or three or four and sometimes five; it all depends on the width of the vein.

Q. May or may not those fissures be mineral or sometimes non-mineral bearing?

A. In that vein sometimes there is ore, sometimes there is granite, and sometimes ore again and granite.

Q. In those same fissures?

A. Yes sir.

Q. In places they become barren then and then ore comes in?

A. Yes sir.

Q. One of those parallel fissures may be barren and another may have pay mineral, may it not?

A. Yes sir.

Q. Don't those parallel fissures that you find in the dis-
151 covery shaft of the Tecumseh bear a close resemblance, so far as their general formation is concerned, to those parallel fissures in the Gold Coin?

A. That is with regard to the way they run in the vein, yes.

Q. You were asked about invisible veins and about miners having a regular vein and then losing it; you say you never saw a case of that kind?

A. I never to my own knowledge worked in a vein where I went off the vein that I was not able to tell the foot-wall or whichever wall I was working on.

Q. Do you think it is possible that a competent miner, familiar with the veins upon Raven hill, could, once having a regular vein, be mistaken and wander off into the country rock?

A. I don't think any competent miner who is working within walls in a vein can ever get away from it.

Q. Have you ever seen any vein, or any claim where there was a vein on Raven hill that didn't have walls?

A. No, I never did; I only saw a few veins on Raven hill.

Q. If there is a crevice there are bound to be walls, are there not?

A. Yes sir.

Q. Have you ever seen any such thing on Raven hill as a crevice with walls and the whole thing be invisible?

A. No, I don't think I could very well see that.

Q. Unless a man was blind?

A. Then he wouldn't see it.

Q. I believe you said that sometimes you might take a piece of rock that came from a vein and a piece of country rock and you couldn't tell the difference with the naked eye?

A. Sometimes, yes sir.

Q. But if you had been there when it was taken out and saw the place from where it came, the naked eye could tell whether it
152 came from vein filling or the country rock?

A. If I had been there and worked continually in the vein so I would get familiar with the rock, I would very likely be able to tell whether the rock came from the vein or not.

Recross-examination:

Q. The gold coin is in a granite formation, isn't it?

A. Yes sir.

Q. It is not in a porphyry formation at all?

A. No sir.

E. C. WOODWARD, being first duly sworn, on behalf of the plaintiff, testified as follows:

Q. Where do you reside?

A. In this city.

Q. What is your business?

A. Assayer and chemist.
Q. Are those some of your assays?
A. They are.
Q. Were they made upon the dates specified here?
A. Yes sir.
Q. Were they made from material furnished you by the parties whose names are given?
A. My recollection is that Mr. Harris and Mr. Wyncoop came in together; I have no particular recollection of who gave me the samples but they are marked as the parties who furnished them requested them to be marked.
Q. But you think they were together at the time they were handed in?
A. I haven't any particular definite recollection but I think so; I am certain that they are marked as the parties requested them to be marked.
Q. Have you made any more recent assays for Mr. Wyncoop?
A. I have.
153 Q. Have you a record of them?
A. Yes sir.
Q. Was this made at the time of the date?
A. It was.
Q. Were those assays made from samples of ore that Mr. Wyncoop furnished you?
A. Yes sir.
Q. And did you sample that identical ore and give him the result as this is given?
A. I did.

Cross-examined by Mr. THOMAS:

Q. The first two certificates that were shown you were made as of the dates they bear?
A. Yes sir.
Q. The 29th and 31st of May, 1897?
A. Yes sir.
Q. And the other was made as of the date it bears?
A. Yes sir.
Q. The 16th day of December, 1897?
A. Yes, sir.
Q. What sort of process did you follow for the making of the assays—what is called the fire process?
A. Yes sir.
Q. The crucible test?
A Yes sir, I use no other process.
Q. Who is the Mr. Harris that is referred to in your examination as to the first two?
A. I really don't know that I know much of Mr. Harris except the time that he came in there.
Q. He is the gentleman who appeared as a witness here at the trial of this case before?

A. I couldn't say definitely, because I was only in here a few minutes before.

Q. Personally have you any knowledge as to the origin of these specimens that you sampled?

A. No sir.

Q. And assayed?

A. Nothing beyond the time that they came to my office.

Q. Did you make any analysis of the rock?

A. No sir; they are as the results are given there.

Q. Now then your certificate of assay of May 29th is
154 marked number 3; did you make other than that one assay for Mr. Wyncoop?

A. Yes sir.

Q. How many did you make for him?

A. I think I made ten or a dozen.

Q. I was speaking now about Mr. Wyncoop particularly and about the assays of May 29th, 1897?

A. Yes sir.

Q. You made ten or a dozen?

A. I made several of them, yes.

Q. But you gave them a certificate of but one?

A. Yes sir.

Q. Why didn't you give them a certificate of the rest of them?

A. I did.

Q. Do you know where it is?

A. No sir.

Q. Have you a record of your assays that you keep at your office?

A. I have.

Q. Why did you make number 3 separate from the others?

A. I was requested to.

Q. By whom?

A. Mr. Wyncoop.

Q. What reason did he give you for asking it?

A. He gave me none.

Q. Isn't it a fact that you made number 3 separately because that gave a return in gold while the others did not?

A. I don't know the reason.

Q. Isn't that a fact as to the assay?

A. I don't know.

Q. You have got a record of them?

A. Yes sir.

Q. Is it a fact that that one showed the values, then, and the other ones did not?

A. Yes sir.

Q. You think there were about ten in all?

A. Yes sir.

Q. One of them showed a value and of that you made a separate certificate?

A. Yes sir.

Q. The others showed nothing and they were put upon a different certificate? That is correct, isn't it?

155 A. Yes sir; they were all put upon one certificate first.

Q. And then Mr. Wyncoop concluded that didn't suit him?

A. He wished to have a certificate of that one, and I gave it to him; it is a very common thing for people to have them separated that way.

Q. On the 31st the certificate reads number 1, and is for Mr. Harris; how many assays did you make for Mr. Harris?

A. Was your first question with reference to those of May 29th?

Q. Yes?

A. I made some four or five of them, and on the last date some ten or a dozen.

Q. Then you made four or five for Mr. Wyncoop on the 29th?

A. I forget whether those are for Mr. Wyncoop or Mr. Harris that were made first.

Q. The certificate bears the name of Harris and is dated May 31st; the certificate that bears the name of Mr. Wyncoop is dated May 29th?

A. On May 31st there were some ten or a dozen; the first time there were some four or five.

Q. Then when you said ten or a dozen you were thinking of the assays that you made on the 31st?

A. Yes sir.

Q. So that when you made those of the 29th there were four or five, of which only one appears on this certificate?

A. Yes sir.

Q. You originally put them all in one certificate, did you?

A. Yes sir, I did.

Q. And then at the request of Mr. Wyncoop you made a separate certificate for the one assayed?

A. Yes sir.

Q. The ten or a dozen that were assayed on May 31st, did you make a certificate for that entire ten or a dozen first?

A. I suppose I did; I always do.

156 Q. Then did you make a separate certificate for assay number 1 by request?

A. I suppose so.

Q. Was it because the others gave nothing?

A. I don't know about that.

Q. Is it not a fact that the others gave nothing as a return?

A. I can't recollect now.

Q. Can you tell by looking at your book?

A. Yes sir.

Q. You knew that at the time you were on the stand at the last trial, did you not?

A. I had my book with me then.

Q. Are you sure?

A. Yes sir.

Q. Your book will show now, will it, what the others ran?

A. Yes sir.

Q. You live here, do you not?

A. Yes sir.

Q. So that your books are accessible?
A. Yes sir, perfectly.
Q. This certificate to Mr. Wyncoop of December 16th, 1897, is for five assays?
A. Yes sir.
Q. How many did you make for Mr. Wyncoop at that time?
A. That is all that I made for him at that time.
Q. I believe you said you had no personal knowledge as to where the samples came from which formed the subject of the assays?
A. No sir; they were brought me, as samples always are, to the office, marked as the person who brings them wished.
Q. Marked as you have marked them here—number 1, 2, 3, 4, and 5?
A. Yes sir.
Q. And they show a correct assay?
A. They do.

157 W. C. WYNCKOOP, being first duly sworn on behalf of the plaintiff, testified as follows:

Q. Where do you reside?
A. In Denver.
Q. What is your occupation?
A. Principally that of a mining engineer.
Q. How long have you been a mining engineer?
A. About thirty years.
Q. Have you any knowledge of the Cripple Creek mining district?
A. Yes sir.
Q. Have you any familiarity with the mines on Raven hill?
A. Yes sir.
Q. Do you know a lode up there known as the Tecumseh lode?
A. I do.
Q. Have you made any examination of it?
A. I have.
Q. Have you had occasion to examine this map?
A. Yes sir.
Q. You may state whether that represents approximately, at least, the Tecumseh lode and the various shafts and workings upon it.
A. It does, yes sir.
Q. Have you ever examined the shaft which is called now the discovery shaft number 1?
A. I have.
Q. When did you first examine it?
A. In May last, some time.
Q. Were you a witness on the former trial of this case?
A. I was, yes sir.
Q. Did you examine it for the purpose of qualifying yourself to testify as to what there was there?
A. I did, yes sir.
Q. Did you at that time and for the purpose of the former trial have any assays made?

A. I did.
Q. Is this one that was returned to you? (Referring to Exhibit N.)
Q. It is, yes sir.
158 Q. You may state whether or not you examined that in company with Mr. Harris?
A. I did, yes sir.
Q. Did you see him take any rock from there to be assayed?
A. Yes sir.
Q. Did you and Mr. Harris go to Mr. Woodward together to have those assays made?
A. My recollection is that we did, or we went in there together; I am pretty sure that we did.
Q. Were you present when Mr. Woodward gave those assays?
A. I think I went and got them; that is my recollection, that he gave them to me.
Q. Was this given you by Mr. Woodward as the result of rock that you handed him from the Tecumseh?
A. It was, yes sir.
Q. And this is rock that was handed him by Mr. Harris?
A. Yes sir.
Q. At the time that you went there together?
A. Yes sir.
Q. Have you made any more recent investigation there?
A. Yes sir.
Q. Did you take any more specimens of rock from that shaft to be assayed?
A. I did.
Q. You may examine that certificate and state whether or not that is an assay given you by Mr. Woodward (referring to Exhibit S).
A. It is.
Q. You may state whether or not you took this piece of rock out of the discovery shaft with your own hands.
A. I took 3, 4, and 5 with my own hands and Mr. Williams took 1 and 2 while I was present.
Q. Did you see him take those from the walls—those specimens?
A. Yes sir; I was watching him most of the time; he sampled differently from what I cared to and that was the reason that I let him take them.
Q. Did he deliver them to you?
A. He did.
Q. Did you take them to the assayer?
A. I did.
159 Q. 3, 4, and 5 you took from the walls yourself?
A. I did; I took it from the vein.
Q. Well, from that shaft?
A. Yes sir.
Q. From the formation?
A. Yes sir.

Q. Out of the body of the rock?

A. Yes sir.

Q. How did you keep and preserve those specimens from the time you took them to the time you delivered them to Mr. Woodward?

A. I tied them up in sacks—the three that I took myself alone; the two that Mr. Williams took we tied together in sacks and I put the five sample sacks in my grip-sack and kept them until I gave them to Mr. Woodward.

Q. Were those new, clean sacks that hadn't been used?

A. Yes sir, they were.

Q. You may state whether or not those first assays were made for the purpose of the former trial of this case?

A. They were.

Plaintiff then offered in evidence, without objection, Exhibits N, O and S; which are in the words and figures following:

160 Ex. S.

Certificate of Assay from E. C. Woodward.

24 East Kiowa street. Telephone 315. Colorado Springs, Colo.

I hereby certify that the samples assayed for W. C. Wynkoop gave the following results per ton of 2,000 pounds:

No.	Marked.	Gold. Oz.	Value. $ Cts.	
1	N. side shaft.....	Trace	.....	$\frac{9}{10}$ ft. on vein.
2	S. " "	07	1.40	4 " "
3	West end "	06	1.20	
4	East " "	05	1.00	
5	Near bottom.....	08	1.60	

Dec. 16, 1897.
Charges, 5.00.

E. C. WOODWARD, *Assayer.*

Ex. O.

Certificate of Assay from E. C. Woodward.

24 East Kiowa street. Telephone 315. Colorado Springs, Colo.

I hereby certify that the samples assayed for Wm. Harris gave the following results per ton of 2,000 pounds:

No.	Marked.	Gold. Oz.	Value. Cts.
1	.....	.22	4.40

May 31, 1897.
Charges —.

E. C. WOODWARD, *Assayer.*

Ex. N.

Certificate of Assay from E. C. Woodward.

24 East Kiowa street. Telephone 315. Colorado Springs, Colo.

I hereby certify that the samples assayed for W. C. Wynkoop gave the following results per ton of 2,000 pounds:

No.	Marked.	Gold.	Value.
		Oz.	*Cts.*
3	.....	06	1.20

May 29, 1897.
Charges —.

E. C. WOODWARD, *Assayer.*

161 Q. I would be glad to have you go on in the language of a mining engineer, rather than a lawyer, I don't profess to be an expert myself, and tell the jury what that discovery shaft of the Tecumseh lode contains; its formation with reference to veins or fissures. Give them an intelligible description of it, if you will?

A. The shaft is thirty-eight feet deep; it is timbered, as I recollect, about twelve feet; I am not certain but that is approximately the distance at which it is timbered; below that there were stulls put in and a ladder leading to the bottom. Below the timbers the shaft shows the characteristic porphyry of that camp. In the bottom of the shaft and in the shaft part way up, or all of the way up, there are three distinct small veins, showing, varying from a seam almost as thick as my finger, to three inches. The western one is what they call their hanging wall or west wall of their vein. It dipped at an angle, I should judge, I measured it but I forget what it was, of some fifteen degrees, possibly, dipping to the west. What is called the hanging wall shows immediately; the little vein shows immediately under the timbers; then there is another that shows near the southeast corner of the timbers, running across the shaft on the opposite side and another one that the shaft does not enter, dipping to the west, until, perhaps, twenty-five feet from the surface. These three veins dip each to the west; each is a distinct and separate parallel vein; they carry in places an undecomposed hard quartz; generally, however, it is softer vein material which is stained with iron and is so much darker than the enclosing country rock that it is visible as a black streak from a half inch to three inches wide, on the wall. I found after examining these
162 little veins very carefully that the hard, undecomposed quartz scarcely ever wider than your finger, thicker than that in the vein. I found that that was probably carried the value, and in every case the assays which you have read where there was value was of that hard quartz; the softer, undecomposed stuff never carried anything more than a trace.

Q. How far apart are those parallel veins?

A. I should say that the east and west ones, showing the shaft, are about seven feet apart; maybe eight, I didn't measure them; from seven to eight.

Q. That is the extreme ones?

A. Yes sir; the extreme east and extreme west; and then the other is midway between them, dipping a little different from the others; dipping to the west, also.

Q. May it or may it not be that it is not the hanging wall and that there may be another vein further to the west and still another further to the east?

A. I should expect to find them in that neighborhood there drifting either way.

Q. Is it not characteristic of Raven hill that where you find one of those small veins you are liable to find another parallel to it and close to it on either side?

A. My observations is that it is very characteristic of it.

Q. Were you acquainted with those geologists, Cross and Penrose, who made this report?

A. Yes sir.

Q. Did you render them any assistance in making these examinations?

A. Yes sir.

Q. What position did they occupy at that time?

A. The United States Geological Survey; they were doing official work.

Q. Do you know whether their report on the mineralogy of Cripple Creek is considered good authority?

A. It is.

163 Q. Do you think they were competent for the business of examining and reporting on that district?

A. Thoroughly.

Q. Are you familiar with their report?

A. I am.

Q. Were you familiar with it at the time they made it?

A. Portions of it I was before it was made; not all of it.

Q. To what extent did you assist them in examining and making this report?

A. I was with Mr. Cross several times during the summer he was there, looking at various claims together and talked a great deal about the indications and conditions; I did no official work, of course; it was simply personal interest from the personal acquaintance and fellowship.

Q. That is to say, you held no official position at the time, yourself?

A. No sir, I held no official Government position.

Q. They consulted with you to some extent about the matter?

A. Yes sir, we figured it out from personal observation, what we thought of this, that and the other; and we frequently talked about the book since it has been published and what subsequent developments have revealed.

Q. I desire to read a paragraph from that report on page 180:

this is speaking of Raven hill—the general features of Raven hill. "The ore occurs in fissures which are formed after the intrusion of the dikes; or sometimes in fissures which were formed previously and along which there was a further movement after the intrusion of the dikes." Do you agree with that statement?

A. I do.

Q. On page 181: "A large part of the ore from all these claims is derived from veins in main zone or parallel fissuring. The workings of the different claims are not connected and they are
164 not necessarily all on the same fissure; but there is very little doubt that they are all on a series of close parallel fissures, forming a fissure zone, in which one fissure may carry most of the ore in one place and another may carry most in another place." Do you agree with that?

A. I do, yes sir.

Q. Have you seen anything in your observation and experience since the date of this report that would modify that statement in your judgment?

A. Not at all.

Q. Have you had in your experience reasons for corroborating that statement?

A. Yes sir, everything that I have seen has been of that character and nature where it has had any bearing at all upon it.

Q. "The ore consists of the country rock impregnated and more or less replaced along the parallel fissures with quartz, iron minerals, occasionally a little fluorite and other materials. The gold is in the form of both free gold and telluride, the former probably being the oxidation product of the latter. The country rock is mostly breccia cut by numerous dikes and irregular masses of eruptive rocks." Is that correct?

A. It is.

Q. On page 184, speaking of the Ingham mine—are you familiar with the Ingham mine?

A. I have never been in it.

Q. "A noticable feature in the Ingham mine is the presence of a system of fissures crossing the main fissures in a direction varying from N. 30 degrees east to N. 45 degrees east and dipping northwestward at different angles. Sometimes this fissuring is indicated by isolated cracks, but occasionally the latter are assembled into zones of parallel and closely adjacent cracks, which often but not always contain ore?"

A. That is characteristic.

Q. You may state whether or not that is a description of
165 the formation as you found it in the discovery shaft of the Tecumseh?

A. It is, excepting I presume that he refers to fissures that are more closely together than that.

Gen. JOHNSON: I desire to submit to the jury the illustration on page 184 of these parellel fissures.

Q. Are you acquainted with the North Star mine?

A. I don't recollect it; I don't think I am.

Q. Do you know whether that is a mine on Raven hill?

A. I don't place it; the name is familiar enough, but I cannot locate it immediately.

Q. Reading from this report: "The ore occurs in a series of parallel fissures which pervade the whole dike and the wall rocks, but which along a certain narrow belt of a few inches in width are closely assembled in a minutely fissured zone, that varies in position in the dike, as shown in figure 22." In reference to the Dolly Varden mine—these are all on Raven hill I have been reading about: "The claim at that time was worked in an open cut on a zone of parallel fissures in the breccia which along these cracks was more or less replaced by iron minerals and quartz, forming an ore often very rich in gold. What appears to be the same ore-bearing zone has also been discovered on the adjoining Mountain Monarch claim and has produced a considerable quantity of ore."

Speaking of the Morning Glory mine, he says: "The vein occupied a well-developed fissured zone consisting of the country rock intersected by a number of parallel and closely assembled cracks. In some places the country rock in this zone is completely replaced by quarts and fluorite, while in other places but little of
166 these minerals is present, although more or less iron occurs in the cracks throughout."

Speaking of the Mary McKinney and Republic mines, he says: "The vein strikes about north 20 degrees to 25 degrees east, dips almost vertically and is largely in the breccia. It varies from one foot to three feet in width and consists of fluorite and quartz in the intimate admixture known as purple quartz, though near the surface the fluorite has been more or less leached out, leaving a granular mass of quartz stained brown by the oxidation of iron pyrites. Occasionally, the vein forks and forms numerous thin parallel bands of ore."

Q. Have you been in some of these other mines on Raven hill?

A. Yes sir, quite a number of them.

Q. Which ones?

A. I have been in the Raven, Republic, Mary McKinney and a good many others at the earlier stages of their development, and the Moose.

Q. In which ones, if any, did you find this system described here of parallel fissures?

A. I think you can find it in the Moose; my recollection of it is that it was there; also in the Raven and the Elkton, I believe, too. It had been so characteristic there that I have not looked for it particularly.

Q. Then the description you give of these three small parallel veins in this discovery shaft, included, as I understand, in distinct walls further apart, is characteristic of that hill?

A. That is my observation; it has taught me that.

Q. These three veins that you speak of are fissures, are they not?

167 A. They are.

Q. Well defined?

A. Yes sir.

Q. Extending from where they first come into the bottom of the shaft?

A. Yes sir.

Q. If they bear mineral, what would you call them?

A. I would call them fissure veins if they bear ore, using mineral in the sense of metal-bearing ore.

Q. In what quantities would they have to bear ore in values in order to be veins?

A. Enough to distinguish it from the enclosing barren country rock to make it distinctly different from that; that would be all. There is no especial amount of values required. There is low-grade ore.

Q. Is there anything, in your judgment, wanting to the existence of veins in that shaft so far as the formation is concerned?

A. Nothing.

Q. If then these assays are correct and the filling of these veins bears gold in the proportion shown by these assays, you would pronounce them well-defined veins?

A. I would.

Q. Having that shaft having these veins and having assays from them, would you, as a mining expert, hesitate to pronounce that there was a discovery there on which a location could be made?

A. No sir, I would not hesitate at all; they answer every scientific requirement or every requirement of a scientific definition of a vein.

Q. Is there anything wanting there to such a vein as a practical miner would immediately pronounce a good discovery?

A. No sir, I should say not.

168 Q. Did you examine shafts number 2 and number 3?

A. Yes sir.

Q. Are there veins discovered in those shafts?

A. Yes sir.

Q. Well defined?

A. Yes sir.

Q. Well-defined crevices bearing mineral?

A. I didn't take any assays of the ore; it looks like ore. I couldn't say that it is because I didn't sample it to determine.

Cross-examination by Mr. THOMAS:

Q. Mr. Wyncoop, you say you are a mining engineer by profession?

A. Yes sir.

Q. How extensively have you followed that business in the last twenty or thirty years?

A. Most of the time; it has been my principal occupation, that of mining.

Q. Hasn't journalism and newspaper work been your principal business for the last ten or twelve years?

A. No sir, it has not been my principal source of livelihood.

Q. I didn't ask you whether it was your principal source of living—your principal business?

A. I suppose if you measure it by time I have given more hours and more days to newspaper work than mining engineering.

Q. You are one of the founders of the Mining Industry, are you not?

A. Yes sir.

Q. And that paper has been in existence how many years?

A. Eleven years.

Q. Before that you were associated with the Daily Press of Denver as a mining reporter, or newspaper man, were you not?

A. To some extent I was, yes.

Q. Were you not to a large extent?

A. Not a very long time, no.

169 Q. What proportion of your time has been devoted to journalism as compared with the proportion that has been devoted to your pursuit or business of a mining engineer?

A. I have been connected with newspapers a little over one-third of the time in the past thirty years.

Q. Have you also been identified with the management of the Denver Mining Exchange?

A. I was when it was first started for about six months.

Q. And since then you have been an official, have you not?

A. No sir.

Q. Simply a member of it?

A. I have not been a member of it for years.

Q. During the last ten or fifteen years have you been engaged in the management and development of mines and mining claims and in charge of mines?

A. I have been engaged in the direction of development work.

Q. As consulting engineer?

A. Yes sir, and as owner.

Q. Where have you been connected with mines as owner and as consulting engineer?

A. I have been connected with mines as consulting engineer in California, Clear Creek county in Colorado, and as owner in Gilpin county and in Cripple Creek.

Q. What mines have you been consulting engineer for in Cripple Creek?

A. I never said consulting engineer in Cripple Creek, I said owner.

Q. What mines have you been consulting engineer for in Gilpin county?

A. I was with the Eagle and Pay Rock.

Q. Latterly or some years ago?

A. Up to a couple of years ago.

Q. In what mines have you been consulting engineer in Clear Creek county?

A. That is Clear Creek county.

170 Q. I thought you said Gilpin county?

A. Owner in Gilpin county.
Q. When did you first examine the Tecumseh shaft?
A. Last May.
Q. With a view of testifying in this suit?
A. Yes sir.
Q. About what time in May were you employed to go there?
A. I have forgotten all about the dates; it was about a week before those assays were made—approximately, a week before.
Q. Had you ever been in the discovery shaft prior to that time?
A. No sir, I have no recollection of having been in it.
Q. Then your first acquaintance with the property was shortly prior to the trial of the other case, or shortly prior to the date of those assays?
A. Yes sir, except a superficial acquaintance; I knew the ground.
Q. Had your acquaintance with the Raven and Elkton and other claims on Raven hill been prior or subsequent to that time?
A. Prior.
Q. Had you made examinations of those other claims critically?
A. Not very critically.
Q. In connection with your duties as a mining engineer you were examining them, were you not?
A. It was partially that, but more for my own satisfaction, for my own instruction.
Q. For the purpose of ascertaining something about the geological conditions of the Cripple Creek district?
A. That was it, yes.
Q. What is your definition of a vein or lode?
A. A fissure in the earth's crust containing ore which is distinctly different from the enclosing rocks.
Q. That is a generic definition for all kinds of veins?
A. It will answer for all veins; I draw a distinction between a lode and vein.
171 Q. Well, what is your definition for a lode?
A. Do you want a common, ordinary miners' definition, or a real correct definition?
Q. I want your definition?
A. A lode is a corruption of the word lead; the word lead, the natural meaning of the word is something that leads to something.
Q. Something that can be followed?
A. Yes sir, it is used in Cornwall and in the old mining regions of the United States, meaning that a lead is going to lead to ore, and they call it a lead. In the West it is not used, so far as I know, in that sense.
Q. But what is your definition of it; you have given us the Cornwall definition; what is your definition of a lode which you say is distinguished from a vein?
A. My definition of a lode would cover all ore deposits except a fissure vein.
Q. Including placers?
A. No, I mean rock-work.

Q. Then your definition of a lode and that of a deposit outside of a placer are practically identical?

A. Yes sir; I think it is used more in a generic sense and not in a special and specific, to represent some specific type, but more in referring to any ore deposit outside of a fissure vein.

Q. What is your definition of a ledge?

A. It would be the same as a lode. A ledge, though, is the common miners' definition; it is quite an unscientific definition; it is simply a ledge, irregular, undefined; it is used to distinguish a lodge——

Q. What is your definition of country rock in miners' parlance?

A. The rock which encloses a vein or ore deposit, or it may be mixed with the ore deposit.

172 Q. What is the prevailing country rock of Raven hill on that part of Raven hill where the claims in controversy are located?

A. It is breccia, commonly called porphyry.

Q. Is it an eruptive rock?

A. Yes sir.

Q. Has it a peculiar fracture? Characteristic of the rock?

A. Nothing any more characteristic than all these volcanic rocks have, I think.

Q. Has it a fracture that is indicative or characteristic of volcanic rock?

A. Yes sir.

Q. As contradistinguished from sedimentary rock?

A. Yes sir.

Q. The volcanic rock is supposed, is it not, to be a rock that is from an eruptive source?

A. It is.

Q. Deposited in a molten condition?

A. Yes sir.

Q. And when it cools it fractures more or less, does it not?

A. Yes sir.

Q. Is there any particular line of fracture or cleavage to this volcanic rock?

A. There is quite apt to be though it is not so distinctly marked as it is in sedimentary rock where the fractures are generally at right angles. In the volcanic rocks the cooling fractures may take more irregular courses, but, as a rule, they follow pretty near distinct lines.

Q. It is quite apt to be more fractured near the surface than further down, isn't it?

A. Yes sir.

Q. What is that caused by?

A. Supposed to be caused by cooling quicker at the surface than below.

Q. What is your definition of a dike?

A. A fissure that is filled with rock that was once in a molten condition.

173 Q. Is there any difference between a dike and a fissure vein, in your judgment?

A. A dike may have been altered and changed so that it has become a fissure vein.

Q. And then it may not?

A. It may not.

Q. Isn't the excepted distinction between a dike and a fissure vein the fact that one is barren of precious metals and the other is not?

A. Yes sir, that is the accepted common difference.

Q. So that the presence of some appreciable quantity of the metals is essential to the existence of a vein as well as a lode?

A. I think so, yes sir.

Q. How many veins did you see in the discovery shaft of the Tecumseh?

A. Three within the shaft.

Q. What are their enclosing walls?

A. Porphyry.

Q. Ordinary breccia or country rock?

A. So far as I can see it looks like it.

Q. Where do these other veins first appear in the shaft?

A. Two of them appeared right at the lower side of the timbers, and the third one does not appear until some distance below, as I recollect now.

Q. How far apart are they?

A. Three or four feet.

Q. What are they filled with?

A. It is a stained material, iron-stained, much darker than the enclosing country rock, but, as I testified before, in places some undecomposed quartz, and in other places it looks as though the vein matter, whatever it had been filled with, was decomposed.

Q. Then those veins are not merely unfilled cracks but each contain decomposed iron-stained matter?

A. Yes sir.

Q. Is it not a fact that all rocks in this eruptive rock near the surface are iron-stained?

A. To some extent I think they are all.

174 Q. Isn't iron the most generally prevalent metal in the universe?

A. No.

Q. You say that it is not?

A. I do.

Q. Doesn't it constitute one-twelfth of the crust of the earth's surface?

A. I presume it does.

Q. Isn't it the most generally disseminated metal; I don't say mineral but metal?

A. No sir; alumina is four times over it.

Q. Is iron the next?

A. I think it is.

Q. Isn't it a fact that these volcanic rocks contain a large proportion of iron?

A. Yes sir.

Q. Isn't it a fact that when exposed near the surface to the action of the elements, frost, heat, etc., that the iron is apparent in these cracks and is deposited there?

A. Yes sir.

Q. And constitute stains which are practically lines of fracture?

A. Yes sir.

Q. Isn't that what you find in these other veins of yours in that discovery shaft?

A. I don't know whether they are lines of fracture carrying fractures or not; and I don't know how they were formed; I have an idea as to that.

Q. I asked you whether what you called the filling is not these iron stains to which I have just called your attention?

A. No, I don't call them the ordinary fracture planes of the country rock, at all.

Q. I didn't ask you about fracture planes; don't you understand my question? Isn't the filling of the fractures, whatever you may call it, the iron stains that are observable near the surface in all porphyry rock?

A. Not entirely.

Q. What is the balance of them?

A. Quartz.

175 Q. What is your definition of quartz?

A. Silica.

Q. Is silica one of the constituent elements of volcanic rocks or breccia?

A. Yes sir.

Q. Is quartz entirely composed of silica?

A. Supposed to be—pure quartz.

Q. Is this pure quartz?

A. No sir.

Q. What proportion of it is silica?

A. Apparently, judging from the looks of it, it would be 80 or 90 per cent. of it.

Q. Did you have any analysis of these quartz streaks made?

A. No, I did not.

Q. Have you got any pieces of that with you?

A. Not with me.

Q. You brought some pieces down?

A. Yes, I forgot to bring it.

Q. Is this quartz that you observed as a part of the filling of these cracks, continuous?

A. No sir.

Q. Does it simply occur here and there?

A. It does.

Q. Can't you find similar deposits of quartz in the breccia everywhere?

A. No sir.

Q. Can't you find it generally?
A. Not like this.
Q. Can't you dig a hole almost anywhere on that hill and find as a part of the breccia pieces of rock that are more silicious than others and pass by the ordinary term of quartz?
A. Yes sir.
Q. But not continuous?
A. Not continuous.
Q. And you say this is not continuous?
A. It is not.
Q. You found some horizontal cracks in that shaft, too?
A. Yes sir.
Q. Just about as persistent and just about as large as the others, didn't you?
A. Yes sir.
176 Q. What are they filled with?
A. Soft, decomposed, iron-stained matter.
Q. Did you find any quartz in them?
A. No.
Q. Nowhere?
A. I did not.
Q. Did you find just as much quartz in them as you did in the others?
A. There may be just as much silica but there isn't any such formation of quartz as I found in the others, distinctive quartzy ore.
Q. If there is just as much silica, there must be just as much quartz?
A. Yes; but it has not taken the same formation; it may analyze but it don't look like it.
Q. You say there is no such quartzy ore?
A. No.
Q. What do you call ore?
A. Rock that carries gold, silver and other metal.
Q. You find ore in these other veins, do you?
A. Yes sir.
Q. When you made your first examination, you did so, did you not, with a view of posting yourself as to existing conditions so that you might truthfully represent those conditions to the jury?
A. Certainly.
Q. You tried to inform yourself of the formation, the existence or non-existence of veins; what sort of veins they were and what their filling was, and everything of that sort?
A. I did.
177 Q. With that end in view, you took some samples for assay, didn't you?
A. I did.
Q. How many did you take?
A. Eleven or twelve or maybe ten; I don't remember.
Q. Who took them with you?
A. Mr. Harris.
Q. Who is Mr. Harris?

A. He is an engineer in Cripple Creek.
Q. He is a mining engineer, is he not?
A. Yes sir.
Q. And the man that made this map?
A. Yes sir.
Q. Can you tell the jury where you took those samples from—your first list?
A. I think I have got it in my pocket, if you wish me to look it up.
A. I would like to know, yes.
A. It is something else I have got here; I find it refers to something else.
Q. Well, trusting to your memory can you tell me about where you took them from?
A. I remember one that I can't tell the number of, that was taken clear across the shaft near the bottom, about 5 or 6 feet in one of those horizontal cracks; and then there was another that we took in the east small vein, picking along on the wall up as far as we could get with the ladder from the bottom.
Q. Did you aim to get the best you could?
A. I did, yes; I didn't know what was best.
Q. They were taken with care?
A. Yes sir. Then there were two others that were taken near a stull in the west end maybe eighteen feet——
Q. And from the top to the bottom of the shaft, I mean all of them?
178 Q. Yes sir, they were taken in various parts all around.
Q. Aiming to get what the shaft disclosed?
A. Certainly.
Q. Did you take the material from the cracks?
A. I took two or three from the cracks and others were taken all around.
Q. Did you take any of this quartz to which you have called attention?
A. No sir, I don't think I got a bit of it.
Q. That you called ore a few minutes ago?
A. Yes sir.
Q. Why didn't you take some of that too?
A. I didn't pick as thoroughly in it then as I have since.
Q. How long did you spend in that shaft at that time?
A. About an hour.
Q. How many times were you there before you testified?
A. Twice, I think.
Q. Was there a Sunday that intervened in the trial?
A. Yes sir.
Q. You went up there on Sunday?
A. Yes sir.
Q. How long did you spend there then?
A. I don't know; I don't remember; it was a short time.
Q. Do you mean to tell the jury that you examined that shaft

with a view of testifying before, examined it carefully and took samples and did not discover the quartz that you say is now there?

A. I do mean to say that I didn't discover the quartz which I found since because I did not give it as careful an examination as I have since.

Q. Then at that time you did not know of the existence of the quartz that you now testify to?

A. No sir, I am sure I did not, or I would have had some samples of it.

Q. And yet you testified that there was quartz there, before?

179 A. There is quartz in the sense of silica all over.

Q. Didn't you testify that there was quartz there in the sense of vein matter?

A. Yes sir, probably I did.

Q. And that you saw it there at that time?

A. Yes sir, that is different; a different kind of quartz from this, though.

Q. You and Mr. Harris together took these samples to Mr. Woodward in this town, didn't you?

A. The last lot we went together, I think.

Q. How many did you take?

A. The last lot?

Q. Yes?

A. Ten or a dozen I think.

Q. How many did the first lot consist of?

A. I think 4 or 5; I don't recollect.

Q. You picked these yourself?

A. Yes sir, the first ones.

Q. And your purpose was to ascertain from assays the characteristics of the rocks with a view of aiding you in your investigation of the facts?

A. Yes sir.

Q. Mr. Woodward gave a return certificate for every one of these assays, didn't he?

A. Yes sir.

Q. Making from 15 to 17 in all?

A. Somewhere about there.

Q. Then did you not ask him to write two of them separately, one being the lot of the 29th and the other on the 31st?

A. I don't remember whether I asked that or not.

Q. Who did?

A. I don't remember; I think maybe I did but I am not sure.

Q. Don't you know that you did?

A. No, I don't recollect whether I did or whether somebody else went down there and got that certificate.

Q. Didn't you recommend it?

A. I don't recollect.

180 Q. Didn't you know it?

A. Didn't I know what?

Q. That a separate assay certificate was written?

A. Yes sir.

Q. For one assay each?
A. Yes sir.
Q. Instead of the whole?
A. Yes sir.
Q. Why was it done?
A. Because it was not necessary, I suppose, or thought advisable to introduce the certificates.
Q. Why not?
A. You must ask somebody else besides me.
Q. You were a witness, were you not?
A. Yes, but I was not interested in the case.
Q. Didn't you know at the time you were testifying before that out of your seventeen assays consisting of the two lots, but two of them gave appreciable returns and those were the only two that you wanted the jury to know anything about?
A. I didn't care anything about it.
Q. Did you say a word when you were up on the stand before about your other fifteen or sixteen assays?
A. I answered every question that was asked me.
Q. Did you say anything about your other assays?
A. I don't remember that I did.
Q. Why didn't you?
A. Because I was not asked the question.
Q. Yet as a mining engineer you had examined that shaft and had taken those assays for the purpose of giving you information that you might tell the jury what the conditions in that shaft were, hadn't you?
A. Yes sir, I sat here then and gave my evidence and answered questions.
Q. And those were the only two assays that were introduced in connection with your testimony before, were they not?
A. I was under the impression that the fact was drawn out that there were other assays made before; I don't remember.
181 Q. Drawn out of you or out of Mr. Woodward after you left the stand?
A. I think it was out of Mr. Woodward.
Q. After you had left the stand?
A. Certainly; he came after me.
Q. You went back there in December and took another list of assays?
A. Yes sir.
Q. What did you do that for?
A. To find out what had value in it and where it was.
Q. You didn't know any quartz was there at the time, did you?
A. I knew there was quartz but I did not know that there was this peculiar kind of quartz.
Q. You knew that there was peculiar quartz there, but you did not know that it was this peculiar kind of quartz?
A. No.
Q. Who went with you there in December to get this particular kind of quartz?

A. I went in there all alone and spent several hours in there.
Q. How long were you there before you discovered this kind of quartz?
A. I don't know; I began to get it pretty quickly, I think, after I got there.
Q. Did you think it was going to get away?
A. No, but I discovered that there was some character of quartz I didn't see before, there.
Q. Did you get these five samples that were assayed in December from the same places where you got the samples that were assayed in May?
A. I got them out of the same shaft.
Q. Did you get them out of the same places in the shaft?
A. I don't suppose I did.
Q. Don't you know where you got them?
A. I know where I got the last.
Q. Can you tell the jury where you got them? I want the
182 identical places?
A. Yes sir, if you will give me the certificate.
Q. I mean the certificate of December 16th?
A. That is what I want; the shaft at the present time has two platforms in it, before getting to the bottom. This number 3 I got that out of the vein, the west vein off of the platform.
Q. Out of the west end of the vein?
A. Standing on the upper platform.
Q. On the upper platform would be about how many feet from the top?
A. I would say eighteen to twenty, maybe.
Q. Didn't you get it from the same place that some one or more of the samples in May came from?
A. Right in the same neighborhood, yes.
Q. And practically the same stuff?
A. I can't say as to that.
Q. If it came in the same neighborhood it must have been?
A. You can find those characteristics of ore an inch apart.
Q. How much did you select at that point in quantity?
A. There was a double handful.
Q. Did you take it out of the vein?
A. Out of the west vein.
Q. Did it consist of this quartz that you didn't know was there before?
A. Yes sir, as near as I could pick it.
Q. What did you do with it?
A. Tied it up in a sack and kept it until I gave it to Mr. Woodward.
Q. Who helped you pick it out?
A. Nobody.
Q. Where did the next one come from?
A. It came out of the east end of the shaft on the second platform—the platform below.
Q. How much did you select there?

A. A good big handful—something of that kind.

Q. Did you pick it out of the vein in the east end of the shaft?

183 A. Yes sir.

Q. Did it consist in whole or in part of this quartz of which you speak?

A. As near as I could get it it was all that.

Q. All quartz?

A. I was trying to get that kind of quartz entirely.

Q. Why?

A. Because I was satisfied that it was the material that carried the values.

Q. You thought that would assay?

A. Yes sir.

Q. What distance was that sample from the other?

A. It may have been twelve or fifteen feet diagonally across the shaft.

Q. On the same level?

A. No.

Q. About how much further down?

A. 7 or 8 or 10 feet; something like that I should say.

Q. Didn't that sample come from the same place where some one or more of the May samples were taken?

A. No, I never got into that place in May.

Q. You didn't take any of the May samples from that point?

A. No.

Q. Why?

A. Because I couldn't get it.

Q. Why couldn't you?

A. There was no platform to get there.

Q. There were ladders in the shaft?

A. Yes, but the ladder didn't go to that point; it was not intended to go there; at least, without standing away out on top.

Q. Where did the next sample come from?

A. That came from standing on the bottom, out of the west vein.

Q. Did that consist of some of this quartz that you subsequently discovered there?

A. As near as I could get it it was; I don't know as it was all that kind but I think there was where I got the best piece of quartz.

Q. There is where you got some samples that were taken in May?

184 A. We got it near the bottom, yes.

Q. How much of that sample did you select?

A. There were about three or four pieces, a handful; something of that sort.

Q. Did that consist of quartz that you didn't see or didn't know the existence of when you were there in May?

A. As near as I could get it it was all of that kind of quartz I was after.

Q. Where did you get the next sample from?

A. That was all I took.

Q. There were two others taken by your directions?
A. Not by my direction.
Q. I understood you to say in your direct examination they were taken by your direction?
A. No sir; I said Mr. Williams took them while I was there.
Q. Took them in your presence?
A. I was there.
Q. You saw him take them?
A. Yes sir.
Q. Who is Mr. Williams?
A. He is a gentleman who is mining right close by there.
Q. Manager of the Ashmont Company?
A. I don't know what the name of the company is.
Q. And owner of the Whale?
A. Connected with the Whale in some way, yes.
Q. Where did Mr. Williams take his two samples from in your presence?
A. I would rather he would testify to that.
Q. And I would rather you would.
A. He took them off of both platforms, if I recollect rightly, and from the bottom, too; I was not paying a great deal of attention to his picking.
Q. You took them from him and brought them down here and had them assayed?
A. We tied them up together and I brought them here.
Q. Why were you not paying attention to him?
185 A. I was studying other things.
Q. What were the numbers of the ones you took?
A. 3, 4, and 5.
Q. And those which he took?
A. One and two.
Q. Did he take samples from any part of the shaft that were included in May?
A. Yes sir.
Q. Practically the same material?
A. I don't know as to that.
Q. Did Mr. Williams call your attention to this quartz that you did not see when you were there in May?
A. No sir.
Q. You found it yourself?
A. Yes sir.
Q. It was your own original discovery?
A. Yes sir.
Q. Was it necessary to put in that shot in the north end to disclose this hitherto unknown quartz?
A. No sir.
Q. Was that blast put in there while you were there or afterwards?
A. I never knew anything about the shot being there that was testified to here.
Q. When were you there last?

A. In December; along about the first of December.

Q. That was at the time the case was set for trial and supposed to be reached?

A. Just before it, yes.

Q. Did you take any other samples?

A. No sir.

Q. For assay?

A. No sir.

Q. Then the 5 which were delivered were the only ones with which you have any personal knowledge since the last trial?

A. That is all.

Q. You say that there was more than one vein in the shaft, didn't you?

A. Yes sir.

Q. Each is distinct and different from the other?

A. Yes sir, I suppose so.

186 Q. If I understood you correctly, you said that perhaps developments made easterly and westerly from the shaft would disclose still more of the same series?

A. Yes sir.

Q. More than one?

A. I couldn't tell how many.

Q. As a matter of fact, the veins are pretty thick in that part of the Tecumseh claim where the shaft is located, aren't they?

A. Yes sir.

Q. Thicker there than anywhere else on the claim?

A. Yes, thicker than shown in any other openings.

Q. Aren't they a little thicker there than you see them in any part of the camp?

A. No sir.

Q. You found one at the end of the cross-cut, didn't you, at the bottom of the shaft?

A. Yes sir.

Q. From the west end of the shaft to the breast of the cross-cut is how many feet?

A. About eighteen and a half.

Q. How many veins does the cross-cut intersect in that distance?

A. I don't know, but there is a little series of vertical fissures right at the east end of the shaft; if they carried up I would call them veins.

Q. And that, you say, is characteristic of the camp?

A. It seems to be.

Q. Where you find one vein there is every probability that in the immediate neighborhood there are more?

A. I would not say that there is every probability of it, but it is frequently the case.

Q. It is more frequently the case than the opposite, isn't it?

A. I think likely it is where cross-cuts have been run to show where you can tell, you find them.

187 Q. You would not confine it to the territory that is embraced in the immediate vicinity of the Tecumseh shaft?

A. Not at all.

Q. Such conditions might possibly include the Ophir discovery shaft?

A. Yes, it might take a course right up there by the Ophir shaft; it might turn that way.

Q. Your attention was called to Penrose and Cross's report which I believe you say you assisted in making?

A. I can't say that I assisted in any official sense at all.

Q. Just in a general sense?

A. I was just interested with them same as anybody else in my position would be who was with them.

Q. You went around with them?

A. Yes sir.

Q. And also familiarized them with what you knew and gave them the benefit of your knowledge, etc.?

A. I think I got more out of them than they got out of me.

Q. So that the obligation is the other way?

A. Yes, decidedly.

Q. Now in discussing parallel seams or fissures, don't the report to which your attention has been called refer to small banded structures or seams very close together and forming a part of the same vein, instead of three or four veins to which your attention has been called?

A. I think it does.

Q. Are there any such conditions in the Tecumseh discovery shaft?

A. No.

Q. Doesn't the Raven vein, the Elkton vein and the Ingham vein to which your attention was especially directed, occur in connection with dikes in which the vein is found, or in the immediate proximity to which it is found?

A. It is true as to the Raven and Elkton but I am not familiar enough with the Ingham to say that that is the case.

Q. You don't say that that is not the case with the Ingham, do you?

A. No sir; I am not sufficiently acquainted with it.

198 Q. Is there any dike or any evidence of a dike in the Tecumseh shaft?

A. No sir.

Q. No appearance of it at all?

A. No.

Q. Isn't it a fact that the veins which form these separate fissures close together in the Elkton and Raven occur either in a dike or in close proximity to it?

A. It is.

Q. And where reference is made to ore appearing in one seam and then in another, — is in connection with the dike formation?

A. In those cases it is; the veins are in connection with the dikes.

Q. Is there anything about Raven hill that is peculiar to that hill, as compared with the rest of the camp?

A. I don't know as there is anything peculiar about that as compared with the other parts of the camp which is geologically like it.

Q. Where the breccia formations are?

A. Yes sir.

Q. That is a good authority in your judgment, isn't it?

A. Yes sir.

Q. I believe you said you agreed with the conclusion which these authors have reached; didn't you say that?

A. Yes sir; at least I do, anyway, whether I said it or not.

Q. Let me call your attention to something that is said on pages 144 and '5:

"The veins are found in all of the rocks of the district breccia, massive rocks and granite. They have in many places been followed down in mining for depths of several hundred feet without showing signs of exhaustion. The ore lines both sides of the fissures, or more commonly both sides of each of the series of parallel fissure. characteristic of the district, and gradually blends into the country rock beyond."

Is that correct?

A. In many cases no doubt.

189 Q. Is it confined to the other parts of the camp outside of Raven hill?

A. The only place which I personally know that occurs is in the granite formation.

Q. Are Cross and Penrose incorrect when they say there are found in all rocks in the district?

A. I say that is the only place in which I am personally acquainted.

Q. "The vein minerals are usually promiscuously mixed, are rarely arranged in bands parallel to the walls as might be the case in ore deposited in an open fissure. The ore generally appears to be simply the country rock containing greater or less quantities of secondary minerals which decrease the amount with distance from the fissure along which they were deposited; and in different places every gradation can be seen from fissures along which the rock has been only slightly impregnated to fissures where most of the ore is composed of secondary minerals blending into enclosed masses or sheets of rock, and finally to the rarer cases where the ore is wholly composed of secondary minerals. In cases where this impregnation goes on a series of close parallel cracks, it extends out from each crack, and as it grows more and more extensive the deposits in different cracks combine into one or more larger deposits. The ore often takes place only along certain of the parallel cracks of a fissured zone and leaves others comparatively unaffected. When the impregnation in the cracks which are affected extends laterally to the barren cracks it often ceases there, leaving a sharp line separating the ore from the rock. Such planes as these are regarded by the miners as walls, and as many miners have a superstition that a good wall is the making of their

mine, irrespective of anything else, they stop right there
190 and follow it as the side limit of their ore. In all districts,
and especially at Cripple Creek this is the wrong thing to do, for ore deposits often occupy a series of parallel positions, and these treacherous walls should be constantly cross-cut to search for parallel veins. Though such so-called walls as those described are found in many or most of the mines of the district and give the impression that the ore is sharply divided from the country rock, yet wherever the impregnation is not checked by a barren parallel crack the ore is seen to blend into the country rock without any sharp dividing line, becoming scarcer and scarcer until it entirely disappears in the barren rock."

Isn't that a correct statement of the ore conditions?

A. I believe it to be.

Q. At page 155 of Cross and Penrose'- work—I should have said page 153 in the summary which these writers give of the situation at Cripple Creek, I find the following:

"The statements in this chapter may be summarized as follows: The gold of the district occurs in both vein deposits and placer deposits, though the veins are by far the more important. The veins occur in and near an area of eruptive rocks which overlie and partly surround a volcanic vent and which are themselves surrounded by granite. The veins occur in fissures which are formed at a comparatively late date in the history of the district. The fissures are usually represented by one main fracture with numerous subordinate parallel fractures, though sometimes two or more main fractures occur close together, and frequently there is no one especially
well-defined break, but there are a number of closely parallel
191 fissures of about equal magnitude. The fissures represent
fault planes of slight displacement. The fissures are markedly affected by the character of the country rock through which they pass. The veins blend laterally into the country rocks of which they are largely a replacement. Veins do not occcur in all the fissures."

Does that correspond with your observations in the camp?

A. It does.

Q. On pages 161 and 162 in treating of the mode of ore deposition, I find this: "All the chemical changes which went on during ore deposition cannot be fully determined for lack of sufficient evidence as to the chemical nature of the solutions which altered the rock and deposited the ore. It has been shown, however, page 146, that the ore is largely a replacement of the country rock and was rarely deposited in open fissures. The process of removing the rock and depositing the ore may have gone on by a chemical reaction between the rocks and the ore-bearing solutions, or the constituents of the rock may have been first gradually removed and then the ore almost simultaneously deposited in their place without the intermediate formation of cavities of any size. Though the former process may have had its effect, the evidence at present available would suggest the primary removal of parts of the rock and the subsequent deposition of ore. The deposition of the ore in this case

may have been caused by a reaction between the metal-iferous solutions and other solutions met in the fissures, while a simple dilution of the metal-iferous solutions by those of different character may have rendered them unable to retain their burden in solution, and may have in this way also produced precipitation. These effects may also have been assisted by the other changes in conditions
192 experienced by the solutions as they approach the surface, such as relief of pressure, cooling, slackening in the rapidity of flow and other conditions."

How does that correspond with your observations?

A. Exactly.

Q. What is impregnation?

A. It is substitution of one mineral by another.

Q. Is that your definition or do you assume to give that of geologists and writers on that subject?

A. That is my own; it is a chemical definition more than a geological definition; all impregnations in mineralogy are simply—that is where one substance has been replaced by another.

Q. Without any fissure or any apparent change sometimes in the country rock, which has been impregnated?

A. That is true.

Q. Isn't that one characteristic method of vein formations in the Cripple Creek district?

A. Certainly it is.

Q. Which is the most porous—the eruptive rock or breccia or granite?

A. Breccia.

Q. The certificate of assay dated May 29, was marked Exhibit N at the last trial, was it not?

A. I don't have any personal recollection of it; I did not charge my memory with it.

Q. In testifying as to the places from which the sample marked N or the sample which was assayed upon the certificate marked Exhibit N at the last trial, did you not locate it as follows:

"Q. Where was that rock taken from? A. It was taken from the Tecumseh shaft? Q. What part of the shaft? A. Three of the samples were taken six feet from the bottom from a horizontal vein, or a horizontal bedding plane it looks more like than anything else; and the fourth was taken from about twenty feet down.

Q. What do you mean by samples? A single piece of rock?
193 A. No sir, carefully picked samples; that is picking all along the vein to get quite a number of pounds of it which would show an average. Q. Do you remember that particular sample? A. Yes sir. Q. Where was that made from? A. It was made up out of the middle fracture and the west wall of the vein at the twenty-foot station or where there were stulls across the shaft at twenty feet from the surface. Q. What is the number of that exhibit? A. N. Q. You may state whether or not that paper is an assay returned to you by Mr. Woodward? A. It is. Q. Of the sample that you have spoken of? A. Yes sir."

Now, that being the case, I will ask you if you remember your testimony as I read it as given at the last trial?

A. I suppose it is correct.

Q. That being the case, if the sample, the assay of which is marked Exhibit N was taken out of the middle fracture and the west wall of the vein at the twenty-foot station where there were stulls across the shaft at twenty feet from the surface which would be about where you took that sample number 3 which was taken in December, wasn't it?

A. Yes sir, approximately at that same place.

Q. You were then asked whether you assisted Mr. Harris in taking out a sample and you answered that you did; didn't you state at the other trial that the sample that you assisted Mr. Harris in taking came from the same place in the Tecumseh vein standing on
194 the same stulls when it was taken about the same place as the other, and further from the same point, but it was not taken from the same identical spot, but at that point in the shaft.

Q. "Did you deliver that to Mr. Woodward or did he? A. He delivered it to Mr. Woodward."

Q. Is that about as you testified with reference to that?

A. As near as I can remember it is.

Q. That would be, then, the specimen there, the assay certificate of which was marked Exhibit O at the other trial in May?

A. I suppose so.

Q. So that the two, substantially came together?

A. Approximately, yes; out of the same portion.

Q. Wasn't that point the only point at the other trial from which you obtained samples that assayed anything more than a trace?

A. I think it was; that is my recollection.

Q. And that was how many feet from the bottom?

A. 18 to 20.

Q. The country rock near the surface there will all give some appreciable assay, won't it?

A. I don't judge that it will, from the experience I have had assaying there.

Q. You were inquired all about that at the other trial were you not?

A. I don't remember.

Q. On the direct examination wasn't this the testimony that you then gave? "You may state whether or not substantially all of that county rock on Raven hill will or will not run a trace? A. Wherever it is taken in such a way as to get some material in the joints in the sample I think it will all run a trace; that has been my experience."

A. That is correct.

195 Q. "In that porphyry generally? A. Yes sir. Q. Where it is broken up and samples are taken from those joints you can find a trace of gold? A. That has been my experience, yes. Q. What is the theory as to the way a trace of gold will get in these joints of porphyry, distant from a vein? A. The waters that percolate through the fractures in the rocks are supposed to have de-

posited their metallic contents in those veins and fractures and joint planes, and if the water carried gold one would find gold there."

And on the cross-examination you were asked this: Q. "I believe you said that you could get a trace there almost anywhere, didn't you? A. I did, yes. Q. How high a result have you known to be obtained from country rock, what is conceded to be the country rock on that hill or in that camp? A. I don't recollect. Q. As high as a dollar and a quarter sometimes, isn't it? A. Possibly; I don't have any definite recollection."

That was your testimony at that time, wasn't it?

A. That is correct now.

Q. It is a fact then that you can get assays from the country rock or what is called country rock on Raven hill near the surface?

A. You can get a trace.

Q. What do you mean by a trace?

A. Something that is too small to weigh.

Q. In values?

A. That would depend entirely on the amount of ore taken for the assay; if you take an assay ton——

Q. Take an assay ton; that is the usual standard.

A. It would be less than forty cents a ton.

Q. That is the usual standard, isn't it?

A. No, it is not the usual one.

196 Q. That is the standard of these assays, isn't it?

A. I don't know what he took, whether he took an assay ton or half a ton.

Q. Doesn't it say?

A. These certificates never tell that; that is something the assayer retains himself.

Q. "I hereby certify that the samples assayed for William Harris gave the following results per ton of two thousand pounds."

A. An assay ton is a different weight entirely.

Q. This says per ton of two thousand pounds.

A. Assayers using the word assay ton don't mean two thousand pounds of ore.

Q. There is no word assay ton there?

A. Those don't refer to assay tons.

Q. Taking a ton as a standard, two thousand pounds, what would you call a trace that could be obtained in what is conceded to be country rock?

A. That would be less than forty cents a ton.

Q. Is it not a fact that you have known assays to be over a dollar?

A. I don't have any recollection of any of my own having run that high, and still they may have done so; I have no recollection.

Q. You are not certain about that?

A. I am not certain about it.

Q. Isn't it a fact that you can frequently find a crevice in the country rock near the surface and below the strike of some good

vein of ore in which there has collected material that you can get an assay of more than a dollar?

A. Yes sir, it is so; in every mining country on earth so far as I know of.

Q. Not only on Raven hill but it is a common fact?

A. It is a common fact all over the world.

Q. What is the direction of the slope of Raven hill where these veins are located with reference to the points of the compass?

A. South and slightly west.

197 *Q.* And the strike of the Tecumseh vein is in what direction?

A. Approximately north and south.

Q. And the strike of the other vein that you state was in shaft number 3 of the Tecumseh people is in what direction?

A. It goes nearly north and south.

Q. So that the dip of the veins there are towards the declension of the hill on the west?

A. Yes sir.

Q. Isn't it a fact or a common occurrence that where a vein dips as these do with the slope of the hill that the upper portion of the vein nearest the surface is more vertical than when you get down some distance into the solid rock?

A. It is true as to the slide; it is not true after you reach solid formation.

Q. You are familiar with the Raven mine?

A. Yes sir.

Q. Isn't it true of the Raven vein?

A. I don't know as to that.

Q. You have been in the Raven discovery shaft, haven't you?

A. I never looked at it, to settle that point.

Q. Isn't it true of the Princess E.?

A. I don't know; it is quite common, though; all veins may change their dip.

Q. Isn't it a geological fact that in obedience to the law of gravitation the movement of a rock is down a hill slipping downwards with the slope?

A. Certainly.

Q. Isn't it a fact that a shaft sunk perpendicularly in many of these hills for working purposes becomes shoved over so that it ceases to be perpendicular?

A. The shaft itself, yes; the movement of the surface of the earth is naturally down the hill.

Q. Now don't veins, dipping as these do, break up and come to the surface in stringers, so to speak, as they get nearer to the surface?

A. Sometimes.

198 Q. It is a matter of ordinary occurrence, isn't it?

A. I can't say that it is; I don't believe it is a matter of ordinary occurrence.

Q. Isn't it a matter of frequent occurrence in Cripple Creek?

A. I don't know but it is.

Q. What is called the blossom of a vein?

A. The float ore which lies upon the surface having been disintegrated.

Q. The blossom is the point immediately where it comes into the wash, isn't it?

A. Not necessarily; the blossom is float rock.

Q. I don't speak about blossom rock, but the blossom of the vein?

A. You mean the outcrop of the vein, the top of the vein where it comes nearest to the surface?

Q. At that point it is broken, isn't it?

A. Quite apt to be, yes.

Q. And shoved over towards the direction of the slope of the hill?

A. If it be an earth that is moved it is usually shoved over.

Q. If these veins dipped east instead of west the apexes of the vein would have a greater slant or incline than otherwise?

A. Certainly.

Q. And as they dip west at the surface they have a less slant or incline?

A. Yes sir, in the movable debris.

Q. I believe you said that you were not familiar with the Ingham?

A. No, I am not.

199 Redirect examination by Gen. JOHNSON (Wyncoop):

Q. Do you find the apex of the vein until you get through the wash?

A. No sir.

Q. Whatever there was of that vein above solid formation, standing on the side of the hill, is likely to have been carried below, isn't it?

A. It may have been carried rods away.

Q. The reasons, I understand, why a vein coming up and approaching the surface on the side hill, is liable to straighten up, is that when it gets into the loose ground, the tendency of the loose ground is down?

A. Exactly.

Q. And the effect of that would be to straighten it up?

A. Yes sir.

Q. Does that apply at all below solid formation?

A. Not at all, only where the earth and rock on the surface naturally moves down the hill.

Q. That is loose rock?

A. Loose.

Q. But after you get down to solid formation where it can only be moved by blasting, there is no tendency to straighten up?

A. Not at all.

Q. What is the tendency there of a vein?

A. It is the natural tendency of a vein, the natural dip, whatever it may be.

Q. Then, as a rule, you would expect, if a vein was coming up towards the surface on a certain angle, that it would continue in that direction, until you reach the wash?

A. Exactly.

Q. In speaking of assays; do you call a trace an assay at all?

A. It is not considered such.

Q. Isn't it a fact, in your opinion, and very probable, a person could get a trace of gold out of this pavement in this city or Denver?

A. Quite likely.

200 Q. Almost anywhere?

A. Most anywhere.

Q. You don't figure that a trace is anything when you come to assay it?

A. No sir.

Q. You don't call it an assay?

A. No.

Q. This ore that you found there on the recent examination that did not attract your attention on the first examination, you say is a kind of quartz?

A. Yes sir.

Q. Is there any peculiar name for that quartz distinguishing it from other kinds of quartz?

A. Only the ordinary name which the miners give it—just quartz, and say this looks hungry; it looks as though it didn't have anything in it; and this looks like live quartz; of course there is a scientific reason for the difference; but those terms give the best idea of it.

Q. What is the peculiarity of that quartz that you discovered in these veins that you say will run gold?

A. It is very hard and contains as far as I can tell apparently nothing but some oxide of iron; it is not decomposed, and the quartz when fractured it looks bright; it looks like what a miner calls live, as though it had been all decomposed and water percolated through it, and got more rusty than anything else.

Q. Would you ever suppose, without more investigation, that would have been the richest ore there?

A. There is nothing until one becomes familiar with the claim; there is nothing to guide you in that way; what probably in one place might be the richest, a similar-looking stuff in another place may not be good at all.

Q. Wouldn't it have been natural to suppose that that softer material of the vein filling there and ore, decomposed, would have been the richer material, rather than this hard quartz?

A. I don't know as one could say that it would be more natural to suppose it, but as a rule the soft stuff in Cripple Creek

201 carries the most values. There is scarcely a mine there now that produced much ore that does not screen their ore, and the soft stuff is what seems to pay, while the ore itself, the hard rock may be so worthless that you throw it away over the dump, and the soft stuff pays to ship.

Q. But in this discovery shaft of the Ophir you think the rule is the other way?

A. Certainly.

Q. It is the harder material that is the richer?

A. It is right there, I am satisfied of that; what it would be at depth I don't know.

Q. At this last occasion those were the only assays you had made?

A. The only ones, yes.

Q. And four out of five of them run appreciable quantities of gold

A. Yes sir.

Q. The other a mere trace?

A. Yes sir.

Q. Have you any doubt of your ability to take any one there and point out rock to them that will assay?

A. Not a particle; at present I think I can do it.

Q. There was one question that was asked you that I did not understand your answer; that is, as to whether these parallel veins,—I got the impression that you said they were usually associated with dikes?

A. Those that I referred to in the books, where they are very close together are associated with dikes; that is, in the two cases that I am familiar with there.

Q. You don't lay that down as a general rule on Raven hill?

A. No I don't lay it down as a general rule.

Q. Isn't it generally the rule the other way, that these parallel veins have no relation to dikes?

A. There are a great many of those parallel veins that have no apparent relation to any visible dike.

202 Q. What did you say a dike was?

A. It is a fissure which is filled with material which was once molten—was filled with molten matter occurring in the earth's surface; it was filled with molten matter which became hardened.

Q. That ordinarily is barren, is not?

A. Usually.

Q. And generally runs without reference to veins? That is to say, is it supposed that that dike was created first or the veins?

A. There is no rule about that; sometimes the veins are subsequent and sometimes prior. You find dikes that cut veins which were in existence when the dike was formed, and then you find other veins that have been formed in dikes, and in the contact between the dike and the enclosing rock.

Q. Ordinarily, you don't call one of these parallel veins, that happens to be barren, you don't call that a dike, simply because it is barren?

A. No.

Q. A dike is a distinct formation that has occurred at different times from different causes from the vein?

A. Yes sir, altogher.

Q. And frequently runs diagonally and across the strike of veins, or without much reference to the strike of veins?

A. Sometimes it occurs that way.

Q. Speaking of these horizontal veins, and particularly on Raven hill, isn't it quite a frequent occurrence that there are several close together?

A. You said horizontal veins?

Q. I mean parallel?

A. Yes sir, it is; it is rather characteristic of every place that I I have seen.

Q. Isn't it almost the unvarying rule on that hill that there
203 are those parallel veins?

A. I think it is.

Q. One, two, three or four of them in a mine?

A. Yes sir, I think that is characteristic.

Q. And all enclosed between walls?

A. Yes sir.

Q. Isn't that so characteristic that the practical miner frequently drifts out one way or the other in the hope of catching another one?

A. Yes sir, they all do that, that have any experience.

Q. Isn't that system of mining recommended by these gentlemen in this book?

A. Certainly it is.

Q. Of making frequent cross-cuts with the expectation of catching another parallel vein?

A. Yes sir.

Q. Speaking of these assays of last spring; you and Mr. Harris obtained several assays that only ran a trace?

A. Yes sir.

Q. You had them first all grouped together in two certificates, did *not* not?

A. Yes sir.

Q. Do you know how they came to be separated?

A. I think now I recall to mind; I did not on my direct examination.

Q. Just state how that occurred.

A. It was upon your suggestion that they should be put into two certificates, showing the two that carried value separate from the other certificates which we had.

Q. Do you remember that I stated that we were making no claim at all that everything in our shaft ran mineral, and therefore it was only necessary for us to produce such assays as helped our side of the case, and if they wanted the others they could have them?

A. I remember it now.

Q. Is it not true that when that matter was first broached and mentioned in court that I made the remark that there were
204 other assays and they could have them if they wanted them?

A. That was made in open court, I believe.

Q. You were asked if a portion of the 30 years that you spoke of as having been an engineer, mining engineer, you hadn't been connected with the press?

A. Yes sir.

Q. You may state whether or not during the most of that time your connection with the press was at the same time representing the mining department?

A. Entirely; I won't say entirely, that is too strong; but it was practically all working in the mining field.

Q. And the most of the writing, etc., that you have done for the papers has been with reference to the science of mining?

A. Most all of it.

Q. Directly in the line of your profession as a mining expert?

A. Yes sir.

205 Recross-examination:

Q. It is since the adjournment that your memory has been refreshed about the reason for the division of the certificate?

A. Yes sir.

Q. Were the certificates showing the barren assays produced?

A. Not to my knowledge.

Q. In connection with whose examination did Gen. Johnson say that there were other assays and that we might have the certificates if we wanted them?

A. If I recollect that it was in open court here; I may be mistaken.

Q. Was it before or after Mr. Woodward's examination?

A. I think it was while Mr. Woodward was being examined.

Q. Was it made at all?

A. That is my recollection now.

Q. You are sure it was in connection with Woodward's examination?

A. That is my recollection; I would not swear positively.

Q. Direct or cross?

A. I could not say to that.

Q. After it was through or while it was going on?

A. My recollection is that it was while he was here on the stand.

Q. Your memory has been refreshed as to that, too, since the adjournment?

A. Yes sir.

Q. You had forgotten both of those things?

A. Yes; I was not certain; I was not going to swear to something I was not positive of.

Redirect examination:

Q. You say you had forgotten; wasn't that your recollection before we talked after the adjournment?

A. I couldn't say that it was strong enough to call a recol-
206 lection; but it was my impression. I am satisfied that in a little while I would have called the incident to mind, enough to have been certain.

Q. You hadn't thought of it since the last trial occurred?

A. Not at all.

Q. Now you just remember that change was made at my direction?

A. I remember all the circumstances connected with it since you called it to mind; it had passed out of my memory then.

CHARLES HARRIS, being first duly sworn for the plaintiff, testified as follows:

Q. Where do you reside?
A. In Cripple Creek.
Q. How long have you resided there?
A. About 2 years.
Q. What is your occupation?
A. Mining engineer and surveyor.
Q. How long have you been a mining engineer?
A. Since about fifteen years—in 1883 I think.
Q. Did you make this map of the Tecumseh lode?
A. Yes sir.
Q. Did you make it from actual survey?
A. Yes sir, actual survey on the ground.
Q. You may state whether or not these shafts represented on there one, two, three and four, and the old shaft, etc., were located on the map there from actual measurements and surveys?
A. They were located from actual surveys.
Q. And they are correct are they?
A. Yes sir.
Q. Did you make any examination of the discovery shaft of the Tecumseh?
A. Yes sir.

207 Q. What is your recollection as to the condition of it as to depth and work that had been done on it?

A. As I remember it was 39 feet deep and a cross-cut from the bottom eleven feet.

Q. Did you measure it?
A. At the time I did, yes.
Q. What indications of a fissure or mineral-bearing vein did you discover in that shaft?
A. I saw in there what appeared to be a well-defined vein composed of several small veins; I should call it one vein about seven feet wide, composed of three or four small stringers, either one of which could be considered a vein in itself, but as a miner I would consider it one solid vein composed of several layers.
Q. What is your understanding as to the proper designation of that kind of a group of small fissures close together seeming to be enclosed in common walls? Are they considered separate veins or generally considered as one?
A. I don't know what other people would consider them; I am only just giving my own views of the matter; I have seen frequently veins containing several small ones, small seams divided by barren places in them.
Q. How many of these distinct fissures are there in that shaft?

A. There are three, as I remember, in the shaft itself.

Q. How far apart are they?

A. The westerly one is about two feet, as I remember, from the next one easterly and then four or five feet to the one on the east side of the shaft. They vary a little; at the bottom they are farther apart, a little, than they are at the top, but very nearly parallel.

Q. Do those fissures all have their own distinct walls?

A. Yes, sir, each one has; sometimes pretty close together, sometimes it is not over a knife blade and then it would be about three or four inches—hardly four inches I think; three was the
208 widest place I saw in either of them.

Q. Do you think you saw opening there as wide as three inches?

A. I do.

Q. Did they occur in all of those veins or only in one or two of them?

A. I didn't measure each vein throughout its whole extent, each crevice; but I remember distinctly of noticing a widening of one of them in one place and then it would narrow again and be thin.

Q. What was your observation of these crevices in reference to continuity—whether they continued as far as you could discover?

A. There is one particularly that is continuous, very close to the timbers and runs down diagonally across the shaft clear to the bottom. The others that are further away disappear in the sides so that you cannot see how far they are continuous, but the most westerly one is quite a continuous seam.

Q. The others continue as far as they can be traced?

A. As far as the opening shows them, yes.

Q. Would you pronounce those fissures well-defined fissures?

A. Quite well-defined, yes.

Q. Would you say that they were well-defined crevices?

A. Yes sir.

Q. Would there be anything necessary to make those, in your judgment, true fissure veins?

A. They might be fissures and not be veins; it would be necessary to have some appreciable values in them.

Q. I had not finished my question; I was going to add, except to find mineral-bearing appreciable values in them?

A. I would not consider anything lacking to make them veins if they carried values.

209 Q. Did you pick any rock from any of those crevices?

A. I did.

Q. Did you have it assayed?

A. Yes sir.

Q. By whom?

A. By Mr. Woodward of Colorado Springs.

Q. How many pieces of rock did you pick?

A. I don't know how many pieces I picked—I picked several different samples; I think there were a dozen or a good many; quite a number of pieces in each sample; I couldn't remember the number of pieces that were taken.

Q. Pieces taken from different places?

A. There were twelve different places where samples were taken from and quite a number of pieces in each sample.

Q. Did you obtain this assay marked Exhibit O from any of those samples?

A. I took that sample.

Q. Do you remember where the different pieces making up that sample were taken from?

A. As I remember, that sample was taken from the west side of the shaft, close to the hanging wall of the vein on the most westerly crevice about 15 or 16 feet down the shaft, as I remember it, probably two or three inches in width of crevice matter there between walls.

Q. Have you been there to examine that shaft since the former trial of the case?

A. I went in for a few moments about the 2nd, I think it was, of February.

Q. Did you have any assays made at that time?

A. No sir.

Q. Did you examine shaft number 2 designated on that map?

A. Not to go into it at all; I just looked into it casually; I located it by survey, but I did not go into it to examine it.

Q. Did you see a vein in there from the surface?

A. I could not testify as to a vein in there; there was something that looked as if it might possibly be a vein, but I would not
210 like to testify now to that from memory; it is quite a long time since I have been in there.

Q. With reference to shaft number 3; did you make an inspection of that?

A. Only to go down a little ways on the timber; there was no ladder in it and there was snow in the bottom and I could not conveniently get into it; I have nothing to say about that shaft.

Cross-examination by Mr. THOMAS:

Q. How long have you followed the profession of mining engineering?

A. It is hard to tell just when one commences; I got into it gradually. I commenced underground work, surveying under ground and examining mines in 1883.

Q. Of what school of technical instruction are you a graduate?

A. Brown university, Rhode Island.

Q. Did you begin the actual practice of your profession upon leaving the university?

A. Very soon afterwards, yes.

Q. Where, in 1883, did you begin work?

A. Lake Valley, New Mexico.

Q. How long did you remain in New Mexico?

A. Only a very short time; probably only two or three weeks at that time.

Q. How long have you been in Colorado?

A. Two years; it is a little over two years. It was the 6th of February when I came here first.

Q. How long had you been in the district prior to your examination of the Tecumseh lode or location?

A. The first time I ever saw the Tecumseh lode was just prior to the last trial, about the latter part of May.

211 Q. You had been here something over a year at that time?

A. Yes sir.

Q. Tell the jury what you understand by the term vein?

A. I consider it a continuous crevice in the earth's crust containing valuable metals in appreciable quantities.

Q. Do you distinguish between the term vein and the term lode?

A. No, it would make no difference whatever in practice, at all.

Q. A continuous crevice in the earth's crust filled with mineral matter?

A. Not filled; containing mineral matter; it may not be filled.

Q. Containing mineral matter fulfills your definition of the term vein and lode both?

A. Yes sir.

Q. Does it also include your understanding of the term deposit?

A. I would consider a deposit a vein.

Q. If it was in place?

A. In place, of course.

Q. So that the term vein you would say is a generic one, covering all of those other expressions?

A. It is a very broad definition; it will cover almost anything.

Q. A crevice presupposes walls of a fissure both hanging and foot?

A. I consider if there is mineral in place there would be walls somewhere.

Q. Does that definition involve the existence of visible walls?

A. Not necessarily, no sir.

Q. The line of demarkation between that which is mineral and that which is country rock may have to be determined by other tests may it not?

A. It may have to be, yes; not always.

Q. It is quite frequently the case, isn't it?

A. Quite frequently yes.

212 Q. What is impregnation?

A. The absorption, I should term it of mineral in the country rock.

Q. It is frequently difficult to determine the line produced by vein matter that is formed by impregnation from the ordinary country rock, is it not?

A. Quite frequently hard to determine.

Q. Are impregnations common in the Cripple Creek district or not?

A. It depends altogether upon the character of the surrounding rock. Sometimes when it is soft enough and porous enough to permit of absorption it will be, otherwise not.

Q. What is the character of the rock on Raven hill?
A. It is generally termed porphyry.
Q. It is an eruptive rock, isn't it?
A. It is.
Q. A porous rock?
A. In cases it is porous and in other cases it is very close-grained.
Q. It is more likely to be porous than some other rock, like granite, for instance?
A. Yes, it would be more or less porous rock.
Q. It is what you would term an absorptive rock on this hill, isn't it?
A. Yes sir.
Q. What do you understand by the term country rock?
A. The general character of the rock that forms the basis of the hill or mountain.
Q. And the substance which encloses the vein?
A. It is the wall rock of the country, outside of the vein.
Q. I understand you to say that there is a vein about seven feet wide, in your opinion, in this shaft?
A. Yes sir.
Q. When did you first come to the conclusion that there was one vein there?
A. Upon the examination of it about last May some time.
Q. You were not of that opinion when you testified in the
213 last case, were you?
A. I think so.
Q. Did you not then say that there were three different and distinct veins in your judgment in that shaft not forming one vein?
A. I understand, if I remember rightly, that I testified that I thought it was all forming one vein; it might be considered one vein; as I say now, either one of them may be considered a vein in itself, but I would consider the whole of that forming one vein and I think that is in substance what I said before.
Q. In the other trial you were asked as follows on direct examination:
"You may go on and tell the jury in your own way what you found in that shaft by way of anything that would be a discovery of a vein? A. I found the main shaft, the shaft portion of the workings, contained a series of fractures, running parallel continuous from the broken portion or float on the surface, down to the bottom of the shaft; I think there are four that occupy a space, a cross-section of about seven feet; they have all the appearance of veins, these three, and upon assaying and sampling I found an appreciable assay of gold in the shaft. Q. What do you find there by way of walls at these extremities of this broken-up vein matter? Anything like lines of demarkation between that and the country rock? A. The veins that I speak of are very narrow and are decided fractures forming the walls, distinct walls and continuous, from practically the surface; that is the surface of the solid rock down to the depth of that shaft,—well-defined, clean-cut fractures, containing vein matter of valuable metal. *A.* Do you find the walls there?

A. Most assuredly; two walls to each of these fractures, distinct."

214 Do you remember that to be your testimony on direct examination?

A. It sounds very familiar, yes.

Q. Upon cross-examination wasn't this, among other things, your testimony:

Q. "Do these fractures which run more vertically in any way differ in their appearance, in their structure or in their contents from those which run more nearly horizontal? A. No sir. Q. Would you call them all veins? A. I would, provided they were all mineralized, yes, and continuous. Q. Then, as a matter of fact, that shaft may disclose a number of veins that divert slightly from the perpendicular and a number crossing them which divert slightly from horizontal? A. Yes sir. Q. About how many fractures did you find that were approximately horizontal from the top to the bottom of that shaft? A. I noticed two particularly; I was not looking especially for that, but I happened to remember that I did see them."

And then were you not asked the question: "Do you call the material that you found in that shaft between the east and the west fracture which you located about seven feet apart, a vein? A. Not one vein, no sir. Q. How many would you call them? A. Four. Q. Four veins? A. Yes sir. Q. Do you call each crack a separate vein? A. Yes sir. Q. Then the walls of the outer cracks, the hanging wall of one outer crack would be the foot-wall of one of the inside ones, wouldn't it and *vice versa?* A. The material forming the wall would be, yes. Q. Isn't it a fact that the material

215 between these different seams or fractures of which you have spoken is identical with the material which forms the walls? A. I think it is. Q. It is country rock, isn't it? A. Yes sir. Q. When you speak of veins in the shaft you mean the seams or fractures or slips which you have spoken of? A. Yes sir. Q. You don't mean to say that there is a vein there seven feet wide? A. No sir."

Was or was not that your testimony at the other trial?

A. Probably it was, since you have read it.

Q. Which is correct, your statement then or your statement now?

A. Either of them is liable to be correct; there is a possibility of these three or four veins forming one.

Q. Either is liable to be correct?

A. Yes sir.

Q. What I want to know is, which of them is correct?

A. Both of them are possibly correct.

Q. Then, as a matter of fact, there is not and there is a vein there seven feet wide, and there are not and there are four veins in there that are not seven feet wide?

A. We are speaking only of my opinion and not as an actual fact; there are three or four crevices which may be individual veins; if they continue on downward side by side they would be one vein in my estimation, at a lower depth either one of them may play out or

they may all play out; one may be the only valuable one in the lot and may be the vein, and the others be nothing; still, there is a possibility of their forming one vein or separating and be each individual veins; it is only as an opinion.

Q. You gave no such explanation in the definition and description which you gave — the former trial, as that?

A. Probably I was not asked for a special explanation.

216 Q. How many horizontal cracks or crevices do you find in that shaft running practically at right angles with this vein or veins?

A. There is one very distinct one that is in the shaft, and another one in the roof of the cross-cut at the foot of the shaft.

Q. There are more than that there are there not?

A. I think very likely there are more.

Q. They are just as persistent and just as continuous and just as parallel as those which are up and down are they?

A. So far as the excavations are concerned, yes sir.

Q. Are they veins?

A. They would be if they contained valuable mineral.

Q. Do they contain valuable mineral?

A. Not that I know of.

Q. So far as one sample it would take about twenty or so all giving appreciable results taken from a connection between one of those horizontal veins with one of those vertical cracks?

A. Yes sir.

Q. Did you take any such material from any of those horizontal cracks?

A. The first three samples that I took were, according to my memory, taken from the lower horizontal crevice.

Q. Is there anything in the appearance or structure of those cracks that run horizontally or substantially so that is different from those which run more vertical?

A. Nothing that I can see, no.

Q. All eruptive rock is more or less fissured and fractured near the surface of the ground, isn't it?

A. It is liable to be, yes.

Q. Can't you see similar fractures to those that you have designated as veins in that shaft in the brecciated rock, or the porphyry rock appearing inside of the railroad cuts right on this hill and in the immediate vicinity of this porphyry?

A. Yes sir.

217 Q. Do you call them veins?

A. I would if they were valuable; if they carried metal I would call them veins.

Q. It depends upon whether they are valuable or not?

A. Whether there is any valuable metal in them or not.

Q. You took twelve samples from this valuable vein or series of veins in this shaft, didn't you, and one of them produced an appreciable result?

A. Yes sir.

Q. The others had nothing?

A. As I remember they were all practically nothing.
Q. Do you call that the presence of valuable metal?
A. I do.
Q. One out of twelve?
A. Yes sir.
Q. In a shaft thirty-eight feet deep?
A. Yes sir.
Q. You didn't produce the other eleven here did you?
A. I don't think I produced them in court.
Q. You had them with you and didn't produce them in court; isn't it a fact that the only place where any one of your twelve assays gave results was about the identical place where the only one of Wyncoop's five assays gave appreciable results?
A. I was not with him when he went through the shaft at that time.
Q. You heard his testimony at that time, didn't you?
A. I was with him when I took these twelve.
Q. Didn't you hear his testimony this morning?
A. I heard the testimony that he had been there since and taken four or five more.
Q. I am speaking of four or five that he took?
A. Prior to that time?
A. Yes sir?
A. Yes sir.
Q. They came from about the same place?
218 A. In the same locality, yes, within four or five feet.
Q. Didn't they come from the same level in the shaft?
A. No, I think his was probably two or three feet deeper in the shaft.
Q. On the west side?
A. If I remember right, mine was about 15 feet deep.
Q. Yours was taken from the first platform?
A. Standing on it, yes; I think I was on the ladder or very close to the first platform, standing up when I took the first ones.
Q. This sample O that you took gives twenty-two-hundredths of an ounce, or $4.40 in value?
A. That is it, yes sir.
Q. Can't you get assays to some extent at least from the country rock on that hill, not to the extent of four dollars and forty cents, but to some extent?
A. I have never been able to get any valuable results unless I was in a vein or very close to it, outside of the surface wash.
Q. I am speaking now about the surface; you can designate it surface wash, but immediately below or within reasonable proximity below the line of outcrop of the valuable vein, the elements will carry appreciable quantities of the metal, will they not, down hill?
A. Yes sir.
Q. And where there are small cavities in the rock it will be apt to accumulate there on account of specific gravity, wouldn't it?
A. Yes sir, it would be liable to.
Q. The point at which you got this sample of four dollars and

forty cents was in a crevice, so far as you can see, that ran clear up to the surface wash?

A. Yes sir, I think it did run up.

Q. And that crevice was hollow nearly all the way up?

A. Above this point it was too thin to be hollow; there
219 wasn't any room for material except stains, possibly.

Q. Were there any apertures in that crack?

A. Occasionally, yes.

Q. And wasn't the material out of that of a very soft, porous character?

A. In places, yes sir, it was.

Q. Didn't the sample that ran four-forty come from a point where the transverse or horizontal fracture, practically made a bottom or basis for the accumulation of the material that may have come from the surface?

A. About two feet and a half above one of those horizontal cracks.

Q. How much space up and down did you take for that sample assay?

A. As I remember, about this much.

Q. From the horizontal crack upwards?

A. No, that much above the crack, to start with and from that on up about a foot or a foot and a half.

Q. You examined the cross-cut at the bottom of that shaft didn't you?

A. Yes sir.

Q. Is there a vein in the breast of that cross-cut?

A. There is a parallel wall in the breast of that cross-cut about 11 feet from the shaft.

Q. Parallel to what?

A. Parallel to the vein in the shaft.

Q. Isn't that the foot-wall of the vein?

A. Under certain conditions it might be.

Q. What would those conditions be?

A. In case there was any connection from one to the other of mineral, or if it continued on parallel to any depth carrying metal it might be considered a foot-wall of this same vein.

Q. So far as the portion of it exposed is concerned it is apparently just as smooth and just as persistent as the other?

220 A. Yes sir, but anything can appear persistent for a foot or two that might not be so if it was carried thirty or forty feet.

Q. It seems to be substantially parallel with the other?

A. Apparently.

Q. And substantially the same size as far as exposed?

A. It is just exposed in places; there is about a four-by-six face.

Q. The space is about the same as the others isn't it?

A. No, in the shaft you are sinking down nearly parallel.

Q. I am talking about that part of it which is exposed; it is the foot-wall of the particular seam or cleavage in the breast of the cross-cut that is left standing, isn't it?

A. Yes sir.

Q. Between that and the hanging wall there is quite a space, isn't there?

A. It is very close together.

Q. But bearing the general characteristics of the fractures that you find in the shaft?

A. Yes sir.

Q. If that cross-cut should be extended in there three or four feet and exposed another of those faces that wall might be the foot-wall of your vein, might it not?

A. It might be so.

Q. Did I understand you to say in answer to General Johnson's question, that these veins occur quite frequently on that hill in parallel classes or conditions or was that Mr. Wyncoop's answer?

A. I didn't say I was familiar with that hill outside of that particular place.

Q. What is the vein filling of these veins or that vein?

A. It is mostly porphyry.

Q. Did you see any unusually hard quartz in there?

A. Not very much.

Q. Was there any of it in there at the time you examined
221 it?

A. I saw what was apparently a quartz and porphyry mixed—rather a hard porphyry; it looked as though there was particles of quartz in it; some of that stuff I picked out for assay.

Q. Was that a part of the stuff you picked out for assay?

A. Yes sir.

Q. And you aimed to get as good as you could?

A. Yes sir, I was looking for the best I could find.

Q. You took a part of what you thought was hard quartz as a part of the vein filling for your assay?

A. It didn't appear very hard.

Q. It was harder than the other rock?

A. It was apparently harder than the porphyry being right close to the crevice.

Q. There was more silica in it, too, wasn't there?

A. Apparently so, yes; there was no test made for it.

Q. And the increased percentage of silica would make it harder wouldn't it?

A. Yes sir.

Q. Did that constitute a part of the various sample- which forms the assay marked "Exhibit O"?

A. That is the same material I tried to get for all the samples.

Q. Did I understand you to say that this hard quartz was persistent throughout the shaft?

A. No, but I was looking for it wherever I could.

Q. And you picked it wherever you could?

A. It was the crevice matter I was looking after.

Q. And it was in a number of these samples that you picked?

A. If I could find any of it; sometimes there was none of it, apparently, that I could find.

Q. You picked twelve samples and the twelve samples
222 were in turn composed of a great many pieces of rock?
A. Yes sir.
Q. Were they broken from quite a large space in the shaft?
A. And in the drift, yes.
Q. Extending over about how much space did each sample represent?
A. There was no regulation distance; I took one sample from the face of the drift all along horizontally, keeping that fracture plane from the face of the cross-cut clear back to the shaft; I should say ten or eleven feet; and in other places I could take samples every two or three inches.
Q. What is the strike of the veins or vein in that shaft?
A. It is a little east of north; probably north 27 east; something of that kind.
Q. Projected in its own direction northerly how near would it come to the Tecumseh shaft number 4?
A. I should say it would pass to the west of number 4 shaft.
Q. How far?
A. I didn't carry it on.
Q. Give us your best estimate?
A. I should say it would pass probably to the west of the shaft fifty or a hundred feet.
Q. That is upon your assumption that it don't change the direction of its strike either locally or generally?
A. Of course.

Redirect examination:

Q. As I understand you, these twelve samples that you took were from various portions of the shaft?
A. Shaft and cross-cut, yes.
Q. Commencing from the top to the bottom?
A. Yes sir.
Q. About at what distance did you pick ore to make up these samples?
A. I took them at no regular distances.
223 Q. You went in there without any knowledge or any previous information with reference to that shaft as to what would assay and what would not?
A. I hadn't any idea what would run and what would not.
Q. And you made up these twelve samples which in the aggregate practically represented the whole shaft, did they not?
A. So far as my guesswork went in regard to what would run and what would not, I had no idea which was the ore and which was not.
Q. It represented about all that you would expect would probably carry mineral?
—. As near as I could judge, not knowing the character of the rock.
Q. Do you remember what the other assays were, other than this one?

A. I think the best we got was a trace, if I remember right.
Q. Didn't they all run a trace?
A. I think so.

Objected to, unless the assay certificates are produced.
The COURT: It may go out.

Q. As I understand you, you haven't made any examination for the purpose of assaying, since then?
A. No sir.

224 FRED BRUCKMAN, being first duly sworn on the part of the plaintiff, testified as follows:

Q. Where do you reside?
A. In Cripple Creek.
Q. What is your business?
A. Assayer and chemist.
Q. How long have you been in that business?
A. 29 years, off and on.
Q. How much of the time have you engaged in assaying?
A. Probably about seven-eighths of the time.
Q. At what place?
A. New York city, Savannah, Ga., and chemical work in Cincinnati, and assay work in Nevada and in Colorado; a short part of the time I have been in Colorado.
Q. Any time at Leadville?
A. For some five or six years in Leadville.
Q. How long at Cripple Creek?
A. About two years.
Q. Have you examined the discovery shaft of the Tecumseh lode?
A. I have.
Q. When did you examine it?
A. It was about the 23rd or 24th of November last.
Q. Did you examine it for the purpose of testifying?
A. I did.
Q. For us in this case?
A. At Mr. John Carr's request I made the assays on the 25th.
Q. Did you take any samples of ore from that shaft and assay them?
A. I did; I took some eight or nine at that time.
Q. Did you take the rock from off the solid formation with your own hands?
A. I took it with my own hands; there was no one with me at the times I took the samples; I took them from the various portions of the shaft that I presumed to be the vein.

Q. How were they kept from the time you took them until
225 the time you assayed them?
A. I put them in sacks which I done up securely and kept them right in my own possession.
Q. Were those new sacks?
A. They were new sacks, yes sir.

Q. Did you make assays of those samples?
A. I did.
Q. Have you those assays with you?
A. I have a memorandum of them with me.
Q. Will you read them?
A. I will. They were taken from different parts of the shaft, of the vein. Some from what I called the north corner where the streak comes in and some from the east side.
Q. We will go into that a little later; you may read the results.
A. The first was $3.80, the second was a trace, the third a trace, fourth a trace, fifth $1.00, sixth a trace, seventh $1.20 and the next one was a trace; those were all that I took on that day; I have been back since.
Q. When was that?
A. It must have been on the 31st, I think, of January; Mr. Edward Carr asked me to go into the shaft again and take one or two assays.
Q. As to those samples that you assayed the last time, did you take down the rock yourself?
A. I did, just as before.
Q. And kept it in your possession?
A. And kept it in my possession.
Q. What were the results of those assays?
A. They were taken from the northeast face near north corner and went a dollar twenty from one and a trace from the other two; I merely took three samples; I took them very nearly one place where I understand there had been a shot put in and had opened up a little bit differently.
Q. What samples did you get from there?
226 A. These three I took from there at intervals of about a foot; one of them gave me a dollar twenty and the other two were traces.
Q. What did you find in that shaft with reference to the formation with reference to whether there is a fissure there?
A. According to my idea there is a vein; I should call it one vein about the width of the length of the shaft, the width of the vein being the length of the shaft, there being a pretty smooth distinct wall on the east side.
Q. On the east side?
A. On the east side, a foot-wall dipping into the shaft; on the west side or northwest side there is also a hanging wall which seems to consist of a number of parallel veins or streaks and it is in these streaks that I took the last three assays.
Q. How is this supposed hanging wall with reference to a surface; is it smooth and well-defined wall of a vein or not?
A. Yes sir, it looks to me like a well-defined vein.
Q. Within the limits of what you designate the vein you found these three distinct subordinate crevices, as they might be called?
A. At least three; there are one or two in the west corner and there is one cuts very nearly the center of the shaft, what I would call a streak rather than a vein, narrow, containing vein matter.

Q. What relation do those crevices bear towards each other with reference to their strike?

A. They are all parallel, dipping westward.

Q. About the same dip?

A. About the same dip.

Q. Are they continuous, so far as they can be traced in that shaft?

A. They are.

227 Q. Do you see any indication or reason to believe but what they are continuous and permanent veins?

A. I see no reason; they disappear at the bottom of the shaft, that is to say they continue to the bottom of the shaft and beyond that I cannot see.

Q. To what extent is that parallel fissuring characteristic of the mines on Raven hill?

A. It is very common, not only on Raven hill but all over the district.

Q. Quite common in that whole district?

A. Quite common in the whole district.

Q. Are they not peculiarly common to Raven hill?

A. I don't know; I am more familiar with those on Raven hill than I am those outside.

Q. What, in your opinion, would be the more appropriate view to take of that system of parallel fissures to treat them all as one vein or separate veins?

A. I should consider those that I saw there as one vein, being close together, having merely what we call gouge matter between them, and as near as I can come to it in my opinion they look like one vein the full width of the shaft between seven and eight feet.

Q. Is it not quite common to find that system of parallel fissures enclosed between two walls, making veins much thicker than that on that hill?

A. It is.

Q. Are not those extreme walls in the mines on that hill frequently ten or twelve feet or more apart?

A. Yes sir, they are in the Elkton mine.

Q. You may state to the jury whether, in your opinion, there is a mineral-bearing vein exhibited in that shaft?

A. I should say there was.

Q. And whether that shaft contains, in the language of

228 our statutes a well-defined vein or crevice?

A. In my opinion there is a well-defined crevice.

Q. Is it or is it not very common that in the mines on Raven hill and near the surface these parallel veins are, some of them, entirely barren and some of them barren in spots and then another spot found that carries mineral?

A. From what experience I have had there that is the case; even paying mines find the same thing.

Q. Isn't it a frequent occurrence that these parallel fissures in the best-paying mines will for considerable distance become entirely barren?

A. Yes sir.

Q. In your opinion does the fact that in places these veins are barren, if mineral that will assay can be found from time to time in the vein detract from the definition of its being a vein?

A. I think not.

Q. Are you connected now with the United States mint?

A. No sir; I was for four years; I was assayer there.

Q. For what length of time?

A. For four years, up to 1894.

Q. Are you the assayer of any mines up there at the present time?

A. No sir; I was up to the 1st of November last, I was assayer on the Elkton for a year and a quarter.

Q. You still keep your assay office?

A. I have an office now at Anaconda.

Cross-examined by Mr. THOMAS:

Q. Are you a mining expert as well as an assayer and chemist?

A. No sir, I don't profess to be.

Q. Are you a practical miner?

A. No sir, I am not a practical miner; that is, I don't mine with my hands; I have had some experience in the mines in the
229 State here for the last twelve or fifteen years.

Q. Your principal duties since you have been in Colorado have been that of assaying and chemical work?

A. Yes sir.

Q. In fact, that has been the bulk of your business?

A. Yes sir.

Q. While you were in Leadville and while you were connected with a mine while you have been in Cripple Creek, you have followed the pursuit of your profession?

A. At such times as I was not doing mining work on my own account.

Q. You have done some mining on your own account?

A. Some little, yes.

Q. And that mining has been through ownership in claims, leases, etc., and not by actual work?

A. Not by actual work, no sir.

Q. How did you come to pick the original samples that you describe from this shaft yourself?

A. Mr. Carr requested me to do so.

Q. Which Mr. Carr?

A. Mr. John Carr.

Q. You have been doing assay-work for Mr. Carr for a good while, haven't you?

A. At intervals, yes.

Q. Also for the Ashmont Mining Company?

A. Yes sir.

Q. The owners of the Whale?

A. I have been doing custom work generally up there.

Q. But those have been among your good customers for some time?

A. They have been amongst my regular customers, yes.

Q. You have read these results from a memorandum?

A. Yes sir.

Q. Was that memorandum made by you at the time the assays were made?

A. It is a copy of one I made at the time.

Q. That is a copy from your book?

A. Yes sir.

230 Q. A carefully prepared copy?

A. Yes sir.

Q. One that you have no reason to believe is in anywise than as the book itself is?

A. Yes sir.

Q. How long were you engaged in taking these samples?

A. A part of two days.

Q. Who assisted you in taking them?

A. No one.

Q. Did you go down there and break off the rock yourself?

A. I did.

Q. Put them in sacks yourself?

A. Mr. Carr took me over the ground first and showed me the shaft—the discovery shaft and the drift and to the Tecumseh discovery shaft, and then left me and I took the samples myself.

Q. He then left you to take the samples yourself?

A. He left me to take the samples myself.

Q. Did you number these samples?

A. Yes, sir.

Q. Beginning with one and ending with 8?

A. I had taken a number of other samples from the Ophir shaft and I numbered them all as given; I don't know whether those were numbered from 1 to 8; I know I numbered them later because I took the others first.

Q. What are the numbers on your book which correspond with the eight samples that you have read?

A. I have no number on my book which corresponds with those, not being in my regular work, I have no corresponding numbers; I simply numbered them on my memorandum.

Q. How do you know them to represent the samples that you took from the Tecumseh shaft; how do you designate them?

A. I made the memorandum first, coming from such and such shaft, and such and such places in them.

231 Q. What is the memorandum that you have made to designate these particular samples?

A. My first one running $3.80 is marked Tecumseh discovery shaft, north corner, depth 16 feet.

Q. The first represents a sample taken from the north corner of the Tecumseh shaft 16 feet below the surface?

A. Yes sir.

Q. Did you measure the distance below the surface?

A. I did.
Q. What part of the vein did that come from?
A. From what they have been calling the hanging wall; the west part of the vein; it is really the northwest.
Q. How did you get at that point, at 16 feet down?
A. There is stulls across the shaft and planks laid across them in places.
Q. Over what amount of space did you gather the material for that sample?
A. Possibly in thickness an inch or so and it may be a foot up and down.
Q. Why did you confine yourself to the thickness of an inch or so?
A. That was the material that seemed to me would run.
Q. The vein was seven feet wide there, wasn't it?
A. The vein itself was seven feet wide but there are parts of it that are undoubtedly barren.
Q. What was the character of the material so far as its appearance and texture goes, that you took?
A. It was mixed; it was porphyry and there was a little silicious matter that has been designated as quartz; I don't know whether I would call it quartz or not.
Q. Hard quartz?
A. It was not as hard as some quartz.
Q. Was it harder than the porphyry?
A. It was harder than the porphyry, yes.
Q. About how much in weight constituted that sample, when you gathered it?
232 A. I don't think I took from over a half to three-quarters of a pound; it is a pretty hard matter from these stulls to get it; consequently, I didn't burden myself or try to pick out any more than I could handle.
Q. You put it in a paper sack?
A. No sir, in a canvas sack.
Q. A new canvas sack?
A. Yes sir.
Q. And put them in your pocket and took them home with you?
A. There were too many to put in my pocket; I took care of them laid them alongside of me and put them together in one sack which I hoisted to the surface and then carried them home.
Q. Did you notice at the time that you took that sample or at any other time, any horizontal fractures there?
A. I did, other cracks.
Q. How close to any horizontal fracture or crevice was this first sample taken?
A. I didn't pay any particular attention; I don't think it was very close to any one of them.
Q. Wasn't there one immediately above or immediately below that point?
A. I think there was one somewhere below that point; possibly a foot or two below.

Q. Did you pick clear down to it?
A. No sir; I don't believe I did. I paid no attention, in fact, t the horizontal fractures.
Q. Have you got a part of the pulp?
A. No sir I have not.
Q. Why didn't you save a part of it?
A. I have not been in the habit of saving any pulps when I ge through assaying them.
Q. Did you use up all of the pulp in your assaying?
A. No sir.
Q. You threw the balance of it away?
A. I threw the balance of it away.
Q. From what point was the next one taken?
A. The next one was taken about two feet lower down and that I think, may possibly have been somewhere near the horizonta fractures.
233 Q. That was on the same north corner?
A. On the same corner, yes.
Q. That was about two feet lower down?
A. Yes sir.
Q. That came in part from the horizontal, did it?
A. It may have; I don't think though it did; I think possibly that was a little below that horizontal fracture.
Q. But from this same seam or crevice?
A. Yes, from the same seam.
Q. Why did you begin 16 feet down?
A. Because that was about as high as I could reach, I think, from the stulls.
Q. There was no way to take a sample any nearer between the collar and the 16-foot point?
A. Not to my recollection; there may have been but as near as I can recollect that was the upper stull I stood on at the time and i was about as high as I could get and the timbers were a short dis tance above that—three or four feet.
Q. Coming back to the first one, how many assays of that one pulp did you make?
A. Two.
Q. What did the first one run?
A. The first one ran $3.60; I didn't make a memorandam of tha here, and the other $4.
Q. Then you split the difference, did you?
A. Yes sir, that is the custom.
Q. And gave the common result $3.80?
A. Yes sir.
Q. Did you make them both at the same time?
A. Yes sir; I made all of those assays at the same time; that i on the same day.
Q. You made them successively?
A. Yes sir; successively; they were put into the furnace as fas as I could put them in.

Q. You don't mean to say that you mixed them together
234 and made assays?
A. No sir.
Q. The next one occurred two foot below; how much material did you gather for that in weight?
A. About the same, I should say; I took very nearly the same in most cases; I gathered enough to make three of our assays in case there should be any accident or a loss.
Q. How many assays did you make of sample number 2?
A. I made them all in pairs, all the assays were made in pairs.
Q. And you got a trace in each instance?
A. I got a trace in the other two.
Q. What do you call a trace?
A. I should consider a trace a mere speck of gold that I can't handle and weigh.
Q. It is so small that your methods of weighing and scales are not sufficiently delicate to determine the amount?
A. That is it, yes sir.
Q. You can get that from any rock there, can't you?
A. I don't know.
Q. You have done it, haven't you?
A. I have from a good deal of the rock, yes.
Q. Where did number 3 come from?
A. That came from the same portion but two feet lower down, about twenty feet.
Q. Still in the north corner?
A. Still in the north corner.
Q. And you took that in the same way?
A. I took that the same way.
Q. Made the same sort of assays, duplicate assays?
A. Yes sir.
Q. And got a trace?
A. Yes sir.
Q. Where did number 4 come from?
A. Number 4 came from what I call the south corner, against the smooth foot-wall, I suppose.
Q. Would that still be on the hanging wall?
235 A. No sir, that would be what I would call the foot-wall nearly seven feet away.
Q. Clear across the shaft?
A. Clear across the shaft.
Q. How was that taken?
A. That was taken in the same way, twenty-three feet from the surface.
Q. And that you assayed the same way?
A. That I assayed the same way.
Q. And got a trace?
A. And got a trace.
Q. Where did number 5 come from?
A. That came from this same wall beyond, between the east cor-

ner; that is to say the further side of the shaft; I took that from the two different sides of the shaft against the wall.

Q. That is the foot-wall?

A. The foot-wall.

Q. Is it on the east side of the shaft?

A. Yes sir.

Q. Did it come from the corner?

A. Very near the corner; not quite the corner.

Q. At the same distance from the surface?

A. At 24 feet.

Q. One foot below?

A. Yes sir, one foot below.

Q. Was it immediately below the other?

A. Nearly so, from one corner, and the other from the opposite one.

Q. How many assays did you make of that?

A. Two.

Q. What was the result of each assay?

A. I don't recall, but they checked very nearly, or I should not have accepted them; there might have been a difference of one one-hundredth.

Q. You gave as the common result, one dollar?

A. I gave as the common result one dollar.

Q. Couldn't you tell me what the two factors of that common result were?

A. I could not without reference to my books, not in quantity.

236 Q. I thought you made a copy of them?

A. I made a copy of the result, the final result. It is not customary to return on the certificates the return on duplicate results.

Q. If one of them went nothing and the other went a dollar the average would still be a dollar between the two?

A. If they had gone that way I should not have accepted them as correct.

Q. If they didn't go that way, how did they go?

A. My recollection is that they checked somewhere within one one-hundredth.

Q. Where did number 6 come from?

A. That came from the southwest face near the center; there was a seam or a vein as it has been called, that passed right about through the center of the shaft.

Q. Do you mean between the two ends of the shaft?

A. Yes sir, between the two ends of the shaft.

Q. And on the south side?

A. On the south side or southwest side as I would call it.

Q. How far from the top?

A. 16 feet from the surface.

Q. Then you went up again?

A. I went up again because it was where I could get it conveniently.

Q. And there you got another trace?
A. There I got another trace.
Q. Where did number 7 come from?
A. That came from the same place but three feet lower down, from the same seam but three feet lower down.
Q. About nineteen feet?
A. About 19 feet.
Q. How many assays did you make there?
A. I made the same.
Q. What was the result of each separately?
A. I don't recall any more than I do in the other cases; the average was $1.20.
Q. Where did number 8 come from?
A. Number 8 came from the same seam at 25 feet from the surface.
237 Q. And in the south side?
A. In the south side.
Q. And that went a trace?
A. Yes sir.
Q. So that every sample you took in that shaft was between 16 and 25 feet from the top of the shaft?
A. Yes sir, that is right.
Q. Did you take any lower down?
A. I did not.
Q. Why not?
A. It was very inconvenient to get down there at the time; there were no means of getting down, in fact.
Q. It was a matter of convenience?
A. Yes sir.
Q. There was a ladder down there wasn't there?
A. I don't recollect that there was a ladder to the bottom.
Q. Did you ask Mr. Carr to furnish you some means of getting down?
A. I did not.
Q. You did not ask for any means for getting below 25 feet or above 16 feet so that you could get a sample?
A. I did not.
Q. Then out of 16 assays that you took from 8 samples, you got more than an appreciable quantity out of six?
A. Yes sir.
Q. Leaving ten in which you got merely a trace?
A. Yes sir.
Q. Number 1 and number 7 were at the same elevation from the top of the shaft, were they not—16 feet?
A. Number 7 was 19 feet; number 6 was the same.
Q. Number 6 was 16 feet?
A. Number 6 was 16 feet.
Q. And number 5 was twenty-three feet?
A. Number 5 was twenty-four feet.
Q. So that at one point on the north corner at 16 feet you got an appreciable assay?

A. Yes sir.

Q. At one point on the south corner at 23 feet you got an appreciable assay?

A. I got a trace there on the east corner at 24 feet.

238 Q. And on the south end at 19 feet?

A. On the south side of the shaft, the long side.

Q. I should have said the south side, you got an appreciable assay?

A. Yes sir.

Q. Why did Mr. Carr want you to come back on the 31st of January to make further assays?

A. It was Mr. Edward Carr asked me to go over there; he said that there had been a shot put in there and it looked a little better and he thought perhaps I would get a higher assay.

Q. He was not very well satisfied with the assays you had already made?

A. I don't know about that.

Q. Was that the reason the shot was put in?

A. Possibly it might have been; he might have thought that three or four assays would be better if I could get more; I judged that was it; I don't know.

Q. You had reported, in the meantime, the results of these assays had you?

A. I made no report to any one; I had mentioned it to him.

Q. You had informed the parties what the results were?

A. Yes sir.

Q. Did you save the pulps in either of those instances?

A. No sir.

Q. You destroyed them all?

A. I destroyed them all. I am not in the habit of saving pulps in my work unless requested to do so, if I make what I consider a correct assay I don't save the pulps.

Q. How far from the surface did the three samples come that you took on the 31st of January?

A. They were all within a foot of each other, at 20, 21 and 22 feet.

Q. Was that in the north corner of the shaft?

239 A. That was in the north corner of the shaft.

Q. And along the line where you had already taken some assays?

A. Yes sir, it was; it may have been six or eight or ten inches further into the shaft.

Q. Did you take three separate samples?

A. Yes sir.

Q. How close to each other?

A. I would say within one foot of each other, at twenty, twenty-one and twenty-two feet.

Q. And you made six assays of these?

A. Yes sir.

Q. You got $1.20?

A. At 20 feet.

Q. As an average result of one of them at twenty feet?
A. Yes sir.
Q. And the other two merely a trace?
A. The other two ran merely a trace.
Q. Coming, as you say, practically from the same place?
A. Yes sir.
Q. And you reported these assays as well, did you not?
A. Yes, sir.
Q. And in answer to General Johnson's question you found in accordance to your ideas one vein about the width of the length of that shaft; what are your ideas of a vein?
A. A vein is mineralized matter showing an appreciable quantity of precious metal between two distinct walls.
Q. You base your idea of a vein there upon the results of your assays?
A. No sir, I should not say that I did; I base my idea upon the fact of there being what I think are two distinct walls.
Q. About seven feet apart?
A. About seven feet apart.
Q. I believe you said there were some crevices between?
A. Yes sir.
Q. Filled with gouge?
A. Yes sir.
240 Q. Was there nothing but gouge between the crevices within that 7-foot space?
A. There may have been; I say there is silicious material.
Q. Tell the jury what gouge is?
A. Gouge is a clayey matter that is found in seams between rocks; generally it is found in the wall,—gouge or selvedge.
Q. Gouge and selvedge are about the same thing?
A. Gouge and selvedge are about the same thing, and they are found directly between the vein itself and the walls.
Q. It is a soft, clayey material?
A. Generally a soft, clayey material, though there might be harder material in it.
Q. Is there seven feet of gouge in that shaft?
A. No sir.
Q. Is there one foot of gouge?
A. No sir.
Q. Is there six inches of gouge?
A. There may be about half an inch.
Q. Is there more than half an inch?
A. On either side I don't think there is, but in these various seams there is a little of this soft, clayey matter.
Q. How many seams did you find there running up and down?
A. There was the gouge matter directly against the foot-wall that I call the foot-wall, and one in the center seam and then there were two or three at the west end.
Q. Two or three close together?
A. Two or three quite close together.

Q. Making five in all nearly equidistant between the two extremes?

A. Yes sir.

Q. And two or three there next to the most westerly one?

A. Yes sir.

Q. And is the space between them gouge?

241 A. No sir, the space between them is porphyry I should say.

Q. Why didn't you take some samples of the porphyry and assay it?

A. Because I felt satisfied that there was nothing in that, while I thought there would be something in the gouge.

Q. You think they were vein material don't you?

A. Yes sir, it was all enclosed within the walls, but in vein material we don't always look for values.

Q. Did the porphyry between these two walls, which you did not assay constitute a horse to the vein?

A. I don't know; I should not say it was a horse.

Q. It was a part of the regular vein material?

A. Yes sir, a part of the regular vein material.

Q. You say you are more familiar with that hill than any other and that the veins generally run in parallel series?

A. Yes sir.

Q. How close together?

A. There is no way of telling that; they might vary in distance.

Q. They might, but how much do they, speaking from your experience, now?

A. There is no regular distance between them whatever; they might be a foot apart and they might be ten feet apart.

Q. What vein besides this one do you know of personally?

A. In the Elkton it varies.

Q. What other?

A. I am not very familiar with any other; the Raven, I have been on that ground.

Q. The Elkton vein is largely identical with the dike running through that country, isn't it? It follows that dike?

A. Yes sir.

Q. Sometimes on one side?

A. Yes sir.

Q. And sometimes on the other?

A. Yes sir.

Q. Sometimes on both and sometimes in the center; that

242 is true, isn't it?

A. Yes sir.

Q. Isn't it the dike that is fissured in different places, those fissures being afterwards occupied by the vein?

A. I never studied the matter sufficiently to answer that question.

Q. You studied it sufficiently to say that that was the way in which it occurred on that hill, didn't you?

A. No sir; I don't profess to have made a study of it whatever.

Q. I understood you to say in answer to General Johnson's ques-

tion that they occurred in parallel series on that hill, you being more familiar with that than any of the others?

A. Yes sir; that is, the few mines I have visited were on that hill.

Q. And the only one that you know besides this is the Raven?

A. Yes sir.

Q. Did you see any dike like the Elkton dike in this shaft?

A. No sir, I did not.

Q. Did you see any semblance of a dike anywhere?

A. No sir.

Q. Do you say that there is a resemblance between the fractures within this seven feet that you find in that shaft and the Elkton vein?

A. I didn't say so.

Q. Is there?

A. I don't know that there is, no sir.

Q. It doesn't look like it, does it?

A. No sir, not like the Elkton vein.

Q. Did you take any other samples and make any other assays than the ones that you have testified to from this shaft?

A. Not from this shaft, no sir.

Q. You have given every one?

A. I have given all the assays.

Q. You didn't make one for anybody else?

243 A. No sir, I took this series of assays and reported all that I made.

Plaintiff then offered in evidence, without objection, a certified copy of the adverse plat, protest and adverse claim, number 1328 of Joseph H. Beals, on behalf of the Tecumseh lode, against the Ophir lode, James J. Cone *et al.* applicant, filed in the land office at Pueblo on the 18th day of June, A. D. 1896; and the same is in the usual form.

Plaintiff then offered in evidence a certificate of cancellation of entry. The same is marked "Exhibit L" and is in the words and figures following:

Name of claimant.	Name of claim.	When sold.	Number of receipt and certificate.	Embracing lot number—	Section or part of section.	Section.	Township.	Range	Area.	Purchase-money.	Remarks. P. O. address.
									Acres. 100ths.	*Dollars. Cents.*	
J. J. Cone, Lyman Robison and H. E. Smith.	Doctor, Chief, Julia E. and Ophir lodes.	January 10, 1893.	270	7644	S. ½ N. W. ¼.	19 30	15	69	33.366	170	M. A. 322 Pat'd. Canceled by Com'r- letter N of March 30, 1896 as to the Ophir lode, Barry, Colo. Surveyor general notified Jan. 11, 1893.

UNITED STATES LAND OFFICE, PUEBLO, COLORADO, *May* 22, 1897.

I hereby certify that the foregoing has been duly compared and is a true copy of M. E. No. 270, the Doctor, Chief, Julia E. and Ophir lodes, J. J. Cone *et al.* claimants, as said entry appears of record in the register of entries of mining lands, of the records of this office.

RAYMOND MILLER, *Register.*

245 Defendants object, being immaterial, incompetent and irrelevant under the issues; which objection was by the court sustained; to which ruling of the court plaintiff by its counsel then and there duly excepted.

Plaintiff then offered in evidence the decisions of the Secretary of the Interior in the matter of contest number 1125 of D. J. Bridge *et al. vs.* J. J. Cone *et al.*, involving mineral entry number 270, as to the Ophir lode. The same is marked "Exhibit K" and is in the words and figures following:

246 UNITED STATES LAND OFFICE,
PUEBLO, COLORADO, *May* 22, 1897.

I hereby certify that the following and attached have been duly compared with the originals on file in this office, and are true and correct copies of the departmental decisions dated December 28, 1895 and March 11, 1896, and Commissioner General Land Office's letters "N" dated January 15, 1896 and March 30, 1896, received at this office in the matter of contest No. 1125, of D. J. Bridge *et al.* *vs.* J. J. Cone *et al.*, involving mineral entry No. 270 as to the Ophir lode.

[SEAL] RAYMOND MILLER, *Register.*

247 N. DEPARTMENT OF THE INTERIOR, C. C. H.
C. F. C. GENERAL LAND OFFICE, J. E. W.
WASHINGTON, D. C., *January* 15, 1896.

D. J. BRIDGE ET AL. *vs.* J. J. CONE ET AL. } Contest No. 1125. Involving M. E. No. 270. Ophir Lode.

Register and receiver, Pueblo, Colorado.

GENTLEMEN: In reference to the above-entitled case, I enclose herewith a copy of departmental decision of December 28, 1895, affirming the decision of this office, dated June 7, 1894.

Notify all parties in interest of said departmental decision, and if, at the expiration of the time allowed for filing motion for review (see rules 76, 77 and 78 of practice, Circular, 5 L. D. 204), no such motion is filed in your office and you have not been informed that one has been filed here, report the case for final action, transmitting therewith evidence of service of notice of decision of the department.

Resident counsel Cone *et al.*, advised this day.

Respectfully, S. W. LAMOREUX,
Commissioner.

a/13.

248 (Endorsement:) "N" Jan. 15, 1896. D. J. Bridge *et al. v.* J. J. Cone *et al.* M. E. 270. Ophir lode. U. S. L. O., Pueblo, Colo. Received — o'clock —. m. —— Jan. 18, 1896 From 5-108 mail. Counter.

249 P. J. C.
Vol. 21–458. F. L. C.

DEPARTMENT OF THE INTERIOR, R. W. H.
WASHINGTON, *December* 28, 1895. V. B.

J. J. CONE ET AL. vs. D. J. BRIDGE ET AL. } Discovery of Mineral Improvements.

The Commissioner of the General Land Office.

SIR: The record before me shows that J. J. Cone *et al.*, on January 10, 1893, made mineral entry No. 270, lot No. 7644, of the Doctor, Chief, Julia E., and Ophir Lode mining claims, in Pueblo, Colorado land district. Subsequently a protest was filed against that portion of the entry including the Ophir lode, by D. J. Bridge *et al.*, alleging that $500 had not been expended in labor and improvements on that claim, and that there was no discovery of any vein, lode, ledge or deposit of mineral thereon. The local officers were directed to order a hearing, and as a result they found that $500 worth of work had been done upon the claims embraced in the application; also that there had been a sufficient discovery of mineral. They, therefore, recommended the dismissal of the protest. Protestants appealed, and your office by letter of June 7, 1894, reversed their finding upon both points, whereupon the applicants prosecute this appeal, assigning numerous grounds of error both of law and fact.

I fully concur in the findings of fact in your said office decision.

250 The testimony of the applicant, Cone, is sufficient in itself to sustain the finding. According to his own computation, giving him the full benefit thereof, there has not been expended $500 by the applicants or their grantors on the Ophir. All the work they have done is to sink a shaft, twenty-five feet in depth, three by six feet inside the timbers, which is timbered about sixteen feet. This work is estimated by Cone to be worth "in the neighborhood of $300," while the witnesses for protestants put it at $100 to $150. The work done on the other claims included in the group, estimated at about $6,000, it is admitted was not done, and cannot be used for the development of the Ophir.

Cone admits, in answer to a direct question on cross-examination, that no vein has been discovered in the Ophir.

Counsel for claimants presents an elaborate argument with the view of showing that the character of the alleged discovery of mineral is sufficient upon which to base a valid location in that mining district, and enters into a long discussion of the meaning applied by the courts to the term vein. I do not deem it necessary to go into a discussion of this subject in the case at bar. It is sufficient to say that there must be a discovery of a vein or lode of quartz or other rock in place bearing gold, silver, etc., in order to make a location of or secure a patent for public lands under the mining statutes.

It is strenuously contended by counsel in a recent brief that the work done on the other claims should be held for the benefit of the

Ophir. This cannot be done, for the reason that the work done is not for the development of the Ophir, as testified to by Cone, but only for the individual claims upon which it was performed.

251 Counsel asks that the applicants be permitted to make the required improvements, and when the evidence has been furnished, that their entry be passed for patent. The lack of improvements is not the only objection to the Ophir entry, the more vital one is the fact that there is no discovery of mineral upon which to base the location. Hence the application must be denied.

Your judgment is, for the reasons above given, affirmed.

The papers transmitted with your office letter "N" of September 24, 1894, are herewith returned.

Very respectfully, HOKE SMITH, *Secretary*.

252 C. C. H.

N. C. F. C. DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE, WASHINGTON, D. C., *March* 30, 1896. J. V. W. J. E. W. J. Mc. P.

In re D. J. BRIDGE ET AL. v. J. J. CONE ET AL. } Contest No. 1125, Involving M. E. No. 270. Ophir Lode.

Register and receiver, Pueblo, Colorado.

GENTLEMEN: Mineral entry No. 270 embraces the Ophir, Doctor, Chief and Julia E. location.

On hearing had on protest of Bridge, it was decided by the department on December 28, 1895, that no discovery of a mineral-bearing lode had been made in the Ophir location and that the required labor or improvements had not been done or made for the benefit of said location.

By departmental decision of March 11, 1896, (of which I inclose copy) motion for review of said decision of December 28, 1895, has been denied.

Said mineral entry No. 270 is therefore hereby canceled as to the Ophir location.

Advise parties in interest thereof and make proper notations on your records. Contest No. 1125 is hereby declared closed.

Very respectfully,
(Signed) S. W. LAMOREUX, *Commissioner*.

253 (Endorsement:) "N" March 30, 1896. D. J. Bridge *et al.* *v.* J. J. Cone *et al.* M. E. 270. Ophir lode. U. S. L. O. Pueblo Colo., received — o'clock — m. $— Apr. 3 1896 From 5–108 mail Counter.

254 P. J. C.
Vol. 21–458. F. L. C.

DEPARTMENT OF THE INTERIOR, G. B. G.
WASHINGTON, *March* 11, 1896. R. W. H.

D. J. BRIDGE ET AL.
v.
J. J. CONE ET AL. } On Review.

The Commissioner of the General Land Office.

SIR: I have before me a motion for review of departmental decision of December 28, 1895, filed by counsel for J. J. Cone *et al.*

It seems that Cone *et al.* made mineral entry No. 270, Pueblo Colorado land district, of four lode mining claims, including the Ophir. Subsequently a protest was filed by D. J. Bridge *et al.*, against the entry of the Ophir, alleging (1) "that the labor and improvements made on said claim" do not amount to $500 in value, and (2) "that no discovery of any lode, vein, ledge or deposit of mineral has ever been made on said mining claim." Your office letter of June 7, 1893, ordered a hearing "to determine the allegations as set forth in said protest." The local officers in ordering the hearing set forth in their notice *in hec verba* the language used in the protest, the material part of which it set forth above.

As a result of the hearing the local officers recommended a dismissal of the protest. On appeal, your office reversed their
255 action, and the department, on appeal by the mineral claimants, affirmed your office judgment, for the reasons set forth in said decision of December 28, 1895.

A review of this judgment is now asked, and several assignments of error are presented, which, as I understand them, may be reduced to two propositions: (1) that there was a sufficient discovery of mineral upon which to base a location in the particular district in which the claim is located, "there being no 'veins' of mineral in that district, but one great 'ledge' or 'deposit' of porphyry, as is well known to every one at all familiar with the district," and that it was error to hold that there was no discovery on which to base a location, "when there was no such averment in the protest, but only the averment that 'no discovery * * * has ever been made;'" and (2) in relation to the improvements.

It will be seen from this that the points suggested by counsel were all considered in the first instance, and that there is nothing new raised by the motion for review. But I think it may with propriety be said that section 2320 (Revised Statutes) specifically provides that "no location of a mining claim shall be made until the discovery of a vein or lode within the limits of the claim located." Section 2401 (General Statute- of Colorado), in defining what shall be done to make a mining location, says: "A discovery shaft (shall be sunk) upon the lode to the depth of at least ten feet from the lowest rim of such shaft at the surface, or deeper, if necessary to show a well-defined crevice." The charge here was that there had been "no discovery of any lode, vein, ledge or deposit" and in the notice issued this charge was

copied. This is the issue, therefore, the lode claimants were
256 required to meet. The defendant Cone admitted on the stand that there was no vein in the Ophir, and there was no attempt made to show that any other form of deposit existed, except that by an assay certificate it was shown that mineral was found of the value of $4.50 per ton. By another certificate, however, introduced by the protestants, it is shown that there was no mineral in the specimen he had assayed. But whatever might be the conclusion from this evidence, it cannot be controverted that there was no evidence to show that the location had been made in conformity with the statutory requirements.

The department in the absence of any testimony, cannot assume that the geological conditions of any given locality are different from those that Congress had in view, when the mining law was enacted, and say that the mineral formation is a "ledge" or "deposit" as distinguished from "vein or lode."

The motion is overruled, and the papers are herewith returned.

Very respectfully, HOKE SMITH, *Secretary.*

Defendants object, being incompetent, irrelevent and immaterial, which objection was by the court sustained; to which ruling of the court plaintiff, by his counsel then and there duly excepted.

Plaintiff then offered in evidence "Exhibit M;" the same is in the words and figures following.

257 Ex. M.

UNITED STATES LAND OFFICE,
PUEBLO, COLORADO, *August* 11, 1893.

Whereas, on October 11, 1892, mineral application by J. J. Cone, Lyman Robison and H. E. Smith for the Doctor, Chief, Julia E. and Ophir Lode claims was placed of record.

And whereas, on January 10, 1893, mineral entry No. 270 was placed of record, in the name of said applicants for the said lodes.

And whereas, by his letter "N" of June 7th, 1893, the honorable Commissioner directed that a hearing be ordered to determine the facts concerning certain alleged irregularities set forth in protests filed by D. J. Bridge, J. H. Beals and Joseph Beals against allowance of entry for the Ophir Lode claim, alleging that:

"Said application is illegal and fraudulent, in that the labor and improvements made on said mining claim by the applicants and their grantors do not amount to five hundred dollars in value, and, as a matter of fact, such labor and improvements do not amount, in value, or cost, to one-half of that sum.

That the said application is illegal and fraudulent for the further reason that no discovery of any lode, vein, ledge or deposit of mineral has ever been made upon said mining claim."

Now therefore, the said parties are hereby summoned to appear at this office on October 11, 1893, at 9 o'clock a. m. to respond and furnish testimony concerning the said allegations.

F. E. BALDWIN, *Register.*

W.

258 Registered.

UNITED STATES LAND OFFICE,
PUEBLO, COLORADO, *August 11th*, 1893.

Messrs. D. J. Bridge, J. H. Beals, and Joseph Beals, care H. B. Johnson, Ernest & Cranmer block, Denver, Colorado.

GENTLEMEN: Enclosed please find notice of a hearing ordered by this office in the matter of mineral entry No. 270 for the Doctor, Chief, Julia E., and Ophir Lode claims, under instructions contained in Commissioner's letter "N" of June 7th, 1893, to determine certain matters in connection with the said Ophir Lode claim.

Very respectfully, FRANK E. BALDWIN, *Register.*

W.

1 enc.

Endorsed: Trial set for Oct. 11, 1893. Wrote Dec. 29, '93.

259 Defendants object, being incompetent, irrelevant and immaterial. The court sustained said objection, to which ruling of the court the plaintiff by his counsel then and there duly excepted.

W. J. WILLIAMS, being first duly sworn on behalf of the plaintiff, testified as follows:

Q. Where do you reside?
A. Cripple Creek.
Q. How long have you lived there?
A. Four years.
Q. What is your business?
A. Manager of the Ashmont Gold Mining Company.
Q. Are you acquainted with the Tecumseh lode?
A. I am.
Q. Have you examined shafts number 1, 2, 3 and 4 as they are laid down on that map?
A. No; I have examined number 1, number four and number three; I have not been in number 2.
Q. You may state what the facts are in regard to shaft number 1 as to whether there is a discovery of a mineral vein in it?
A. There is.
Q. A well-defined vein?
A. Yes sir, a well-defined vein, or it might be, there are other small veins or seams which I think would eventually converge together and form one large vein.
Q. You may state whether or not in your opinion there was a discovery of a vein, a well-defined, mineral-bearing vein in shaft number 3?
A. There is a well-defined vein there which will vary from three to five inches.
Q. Bearing mineral?

A. I could not say but I should judge so from my observation, from examining the rock.

260 Q. Did you ever take any rock from the discovery shaft to be assayed?

A. I did.

Q. When was that?

A. It was about the first of December, I took two samples.

Q. Are those the ones referred to by Mr. Bruckman or are they different?

A. No, Mr. Wyncoop.

Q. Those were embraced in that list one and two on that list that he gave?

A. Yes sir.

Q. You may state whether or not those crevices in that discovery shaft are well defined and continuous so far as they can be traced?

A. Yes sir, they are.

Cross-examined by Mr. THOMAS:

Q. How long have you been mining, Mr. Williams?

A. About four years.

Q. In Cripple Creek?

A. Yes sir.

Q. Is your mining experience confined to that district?

A. That is all.

Q. When did you examine the Tecumseh shaft?

A. The discovery shaft?

Q. Yes?

A. It was in December, the first time that I was down that shaft.

Q. Who was with you?

A. Mr. Wyncoop; I came along just as Mr. Wyncoop came out of the shaft; I was riding up to the well.

Q. How long — time did you spend in that shaft?

A. Probably about an hour and a half.

Q. Is that the extent of your examination of it?

A. That was all.

Q. You never have been in there since, nor before?

A. No sir.

261 Q. Did you go to the bottom of it at that time?

A. No sir, I did not; I went down where there are some stulls in it; I should judge it was about twenty-eight feet.

Q. Did you see far enough to determine in your own mind that there was a vein in there?

A. There was snow in the bottom and I had light shoes on and I didn't want to go down.

Q. What sort of vein was it that you found in that shaft?

A. In reality it might be called three different veins that I think will ultimately come together; there is one in the west end of the shaft and then east of that, between two and a half and three feet, there is another; and then about four feet further east is a third, and the filling of that is a porphyry that differs from the country

rock there; it has considerably more silica in it and is heavily impregnated with iron.

Q. Did you see any horizontal veins in that shaft?

A. Lower down I could see one but I didn't give it any examination.

Q. Just about as well defined as the ones running vertically, were they not?

A. No.

Q. As far as you could see it, it was, wasn't it?

A. The vertical veins I had right before me within six inches of my face; the other was down two or three feet.

Q. How far down?

A. Probably two or three feet from where I was.

Q. Didn't you see but one?

A. That was the only one that I discovered.

Q. From what point did you take your samples?

A. At a point from 19 feet from the collar of the shaft down to 20 feet and 8 inches.

Q. On the north side of the shaft?

A. I took one on the north and one on the south side.

262 Q. Covering a space from 19 feet to how many?

A. 19 feet down to 20 feet, 8 inches; it was really a foot and eight inches of the vein.

Q. Along the west wall?

A. No, it was the middle one I took.

Q. What was the bulk of each sample that you took?

A. This porphyry with hard quartz in it, heavily impregnated, as I said before, with iron; and what in my estimation was the pay portion of the vein.

Q. About how many pounds did you take for the purpose of making the sample?

A. Two double hands full.

Q. What did you do with it then?

A. Put them in a sack, put in a slip at the time, marking them, gave them to Mr. Wyncoop and that is the last I heard of them until today.

Q. You don't know what Mr. Wyncoop did with them personally, do you?

A. No sir.

Q. You say you are superintendent of the Ashmont Company?

A. Yes sir.

Q. What claim does that company own?

A. The Whale?

Q. The Whale occupies that portion of the Ophir location that the Tecumseh don't, doesn't it?

A. It does, yes sir.

Q. And no adverse was filed for the Whale against the Ophir application for patent, was it?

A. That I don't know.

Q. Don't you know that unless the Tecumseh prevails in this suit there is no Whale location?

A. No sir.
Q. Haven't you been aware of that for some time?
A. I have recently heard so; I have never looked it up.
Plaintiff objects, being immaterial.

Q. Isn't the Ashmont Company assisting in the defense of
263 this suit?
A. Yes sir, it is.
Q. One of the counsel employed is employed by that company, isn't he?
A. Yes sir.
Q. And as a consequence, the prosecution of the suit is being made jointly by your company and the owners of the Tecumseh?
A. We contribute a small amount.
Q. Your discovery shaft is within the boundaries of the Ophir location, if there is one?
A. Yes sir.
Q. And about how far from the Ophir discovery shaft?
A. About a hundred feet.
Q. You, yourself, are largely interested in the Ashmont Company, are you not?
A. Yes sir.
Q. And one of its officers?
A. Yes sir.
Q. And you have in the last two or three months manifested considerable feeling against one of the defendants, haven't you?
A. I don't think so.
Q. Didn't you write Mr. Cone a letter some three or four months ago?
A. In response to one from him.
Q. And the one that he wrote to you was in response to another that you wrote to him, wasn't it?
A. No sir.
Q. Didn't you write the first letter?
A. No sir.
Q. Do you mean to say that you didn't write a letter to Mr. Cone to which he responded and to which you again responded?
A. No, Mr. Cone never responded to my letter.
Q. Then he wrote to you first and you answered him?
A. No, he wrote to Mr. T. C. Early and the letter was turned over to me.
Q. Wasn't Mr. Early's letter written to Mr. Cone and Mr. Cone responded to Mr. Early?
A. Yes sir.
264 Q. So that the correspondence originated with your attorney?
A. Yes sir, the attorney for the company.
Q. By your directions?
A. Under the directions of the board of directors.
Q. With your knowledge?
A. With my knowledge, yes sir.

Q. And in reply to that you wrote a very bitter personal letter to Mr. Cone, didn't you?

A. I don't think it was.

Q. You would not call that a personal letter?

A. No sir.

Q. Wasn't it an abusive letter?

A. No sir.

Q. Not from your standpoint?

A. Not from my standpoint; it might have been from his.

Q. Do you mean to say that you have no feeling against Mr. Cone either growing out of that letter or at the time it was written?

A. I can't say that I have got any feelings against Mr. Cone; he has his interests and I have mine.

Q. It is your interest I am talking about; in that correspondence didn't you manifest a good deal of feeling against Mr. Cone?

A. I might have made the letter a little stronger than I would after mature consideration, in answer.

Q. And the correspondence had reference to this Tecumseh and Ophir litigation, didn't it?

A. Yes sir.

Mr. THOMAS: If your honor please, I desire now to make an objection to the two location certificates of the Tecumseh claim which were presented yesterday. The first location certificate is presumptively based upon a location of a claim said to have been discovered on the 18th day of April, 1892. It claims one hundred and fifty feet on each side of the middle of the vein at the surface,
265 with thirteen hundred feet running north 28 degrees east from the center of the discovery shaft and 200 feet running south 28 degrees west from the center of the discovery shaft, and then follows a description by metes and bounds.

It is admitted by counsel in his opening address to the jury and by Mr. Bridge and Mr. Hoenshell, the only two who have testified of the witness- for the plaintiff, concerning the so-called discovery shaft of this location, that there is not and never was any vein, lode or ledge such as is contemplated by the statutes of the United States and which must be the basis of all lode mining location-; and, as a consequence the certificate itself is of no value and represents absolutely nothing.

The boundaries, even, are vastly different from those which are represented by the other location certificate; this being the old shaft which extension in this direction was 200 feet, its extension westerly was beyond the westerly side line of the present location, and its extension northeasterly was some five or six hundred feet, at least, beyond the northeasterly line of the present location.

The other location does not even pretend to be an amended one; it has reference to another discovery shaft, to another date of discovery and to other work and to other boundaries; and, that being the case, it ought not to go to the jury for any purpose whatsoever. And there are no boundaries such as the law contemplates; corner

number 4 was never designated by any stake set at the point or by any witness stake marked in any manner whatsoever.

General JOHNSON: I will ask the court to permit me to examine Mr. Carr about those corners?

266 J. W. CARR, being recalled for the plaintiff, testified as follows:

Q. Mr. Carr, you may state what kind of stones those corners and side stones mentioned in this certificate of location are.

Defendants object to any parol testimony to vary the terms of a written instrument.

Objection overruled, defendants excepting.

A. They were oblong stones about 18 inches long, I should judge, or two feet, probably, or nearly so—the portion that was out of the ground: they stuck up from a foot to fifteen or sixteen inches above the ground.

Q. Smoothed on the inside?

Defendants object; objection overruled; defendants excepting.

Q. You may state whether or not those stones were sunk in the ground.

A. They were.

Q. So that they were substantial?

A. Yes sir.

Mr. THOMAS: I suppose it is understood that the same objection goes to all of these questions and the exceptions?

The COURT: Yes sir.

Q. In regard to this corner number 4 down by the railroad, you may state whether or not there is a stone corresponding with the other corner stones of that claim, in the vicinity of where this corner would be placed on the road-bed?

Defendants object, being improper and incompetent and varies the terms and conditions of the location certificate; which objection was by the court sustained; to which ruling of the court, plaintiff, by his counsel, then and there duly excepted.

267 Thereupon the court excluded the original location certificate of the Tecumseh lode, Exhibit "A;" to which ruling of the court the plaintiff, by his counsel then and there duly excepted.

Thereupon the court admitted in evidence the additional location certificate of the Tecumseh lode, Exhibit "B;" to which ruling of the court defendants then and there duly excepted.

268 CHARLES MCNUTT, being first duly sworn on the part of the plaintiff, testified as follows:

Q. Where do you reside?

A. Leadville.

Q. What is your occupation?

A. Mining engineer.

Q. Does that embrace surveying?

A. Yes, sir.

Q. You may examine that paper, whose writing is that? (Referring to Exhibit A.)

A. The bulk of it, except the signatures, the description is all mine.

Q. You may state whether or not you made the survey for this location?

A. I did.

Q. You may state what posts you set for the corners and side lines, etc.?

Defendants object; the certificate is conclusive evidence, having been introduced and received and it cannot be varied or explained.

General JOHNSON: For instance, at five of these corners there is a stone corner, and we want to show what kind of a stone it was; and corner number four is called a witness corner, or a witness corner is called for, but it does not say what was set there.

Defendants object further that no witness corner of any kind is referred to in the certificate, consequently, none can be testified to by this witness.

Objection overruled, defendants excepting.

Q. You may state what kind of a stone you put at corner number one?

Mr. THOMAS: All this goes under the same objection and exception.

The COURT: Yes, sir.

269 Q. Have you your notes of this survey with you?

A. Yes sir; a stone two feet long, five inches square, set twelve inches in the ground, chiseled 1 over 9005.

Q. What kind of a stone did you put at the side line corner number two?

A. Corner number two is a stone twenty-seven by ten by six inches set eighteen inches in the ground.

Q. And how marked?

A. Chiseled 2 over 9005.

Q. What did you put at corner number three?

A. Three is a stone thirty-one inches long by six by eight inches square, set twenty inches in the ground, chiseled 3 over 9005.

Q. Now go to corner number four?

A. That is a witness corner, a stone forty inches long by seven by eight inches square set twenty inches in the ground, chiseled W C 4—9005.

Q. Why didn't you set that stone exactly at the corner?

A. It was on the road-bed; it was inaccessible for the establishment of a permanent corner.

Q. What road is that?

A. The Florence and Cripple Creek railroad.

Q. What was the condition of the road-bed there?

A. It was being used.
Q. It was used for a railroad?
A. Yes sir.
Q. What was the grade of it?
A. That I don't remember.
Q. Was it up high or sunk in the ground?
A. It was pretty well banked up, probably, from memory, twelve or fifteen feet.
Q. Would it have been practicable to set a stone on the side of these banks; would that have been a place that would have been secure?
A. I didn't think so at the time and I don't think so yet.
270 Q. Would it have been safe or practicable for you to have gone upon the track and set a stone?
A. A stone would not have lasted; it was safe enough to go up there.
Q. A stone of that kind, could it be put on a road-bed without interfering with the road in running trains?
A. Not to let it project up as high as it should; I suppose it could have been flush, but then it would not have served its purpose, it would have been too hard to find.
Q. So that you set a witness corner there at the distance specified in this from the true corner?
A. Yes sir.
Q. Now you say in this certificate "on a road-bed;" do you know exactly where that corner would have come, whether it would have been on the track or outside of the rails?
A. My memory don't carry me back that far, but I know at the time it was unsuitable or I would not have called for a witness, but more I could not say.
Q. What did you set at corner number 5?
A. A stone thirty inches long by seven by ten inches, set twenty inches in the ground, chiseled 5–9005.
Q. Was that the number for survey for patent that was afterwards given you?
A. Yes sir.
Q. Then, if I understand you, these stones were set at the time to be adapted as corners for the location and also corners for the patent survey?
A. Yes sir.
Q. What did you set at corner number six?
A. A stone twenty-five inches long by seven by four inches, set fifteen inches in the ground, chiseled 6 over 9005.
271 Q. This first corner according to this certificate of location is one foot and seven-hundredths of a foot from patent survey number 7644, Ophir lode?
A. Yes sir.
Q. That is correct, is it?
A. Yes sir, that is correct.
Q. That was a former patent survey, was it not?
A. Yes sir.

Q. And then it also refers to Mt. Pisgah?
A. Yes sir.
Q. And at another place in this certificate it is tied to the patent stakes of the Ophir lode and Mt. Pisgah, and giving the general location of it there with reference to the town and the quarter section of land that it is located in; I desire to ask you whether in your opinion any one would have any difficulty in taking that certificate of location and going right to all of these corners and finding that claim?

Defendants object, being incompetent and immaterial; objection overruled; defendants excepting.

A. Not the slightest. I might say I omitted one thing in the description of the corners. I put a stake beside each one and a description of the corner also.
Q. A stake besides the stone?
A. A small stake to indicate the position and for the better purpose of writing the name on.

Defendants move to strike out the answer.
The COURT: Yes, let that part go out; the answer may stand as it was at first.

Q. I will ask you further if in addition to these stones you put up other monuments.

Defendants object; objection sustained, plaintiff excepting.

Cross-examined by Mr. THOMAS:

272 Q. When were you summoned to appear in this case?
A. Last night.
Q. By telegraph?
A. Yes sir.
Q. Where?
A. In Leadville.
Q. And you came on last night's train?
A. Yes sir.
Q. And brought your notes with you?
A. Yes sir.
Q. Those stones that you set for monuments all bore the numbers 9005 did they not?
A. Yes sir.
Q. When was that survey made—give the date of it?
A. It was started June 13th, 1894, and completed June 17th, 1894; that is, the location survey was completed.
Q. When was the survey made that the monuments were set for and marked 9005 that you have just read; that is what I am after?
A. The survey was made about those dates, but the corners were marked plainly and chiseled.
Q. Was that the patent survey or was it the original survey?
A. That was the location survey.

Q. When you made the location survey did you have a patent number from the surveyor general's office?

A. No sir.

Q. Then when you originally set those stones there were no marks of 9005 placed upon them at all, were there?

A. No sir.

Q. When did you put that number upon them?

A. I don't remember exactly; it was the latter part of June, though.

Q. Of the same year?

A. Yes sir, the same year; it was probably the 23rd or 24th of June.

Q. Do you know the date of the order of the surveyor
273 general authorizing a patent survey giving number 9005?

A. Yes sir.

Q. What?

A. The 22nd of June.

Q. 1894?

A. 1894.

Q. Then the surveyor general's number had reached 9005 in June, 1894?

A. Yes sir.

Q. What time elapsed between the setting of those stones and the marking of them?

A. About a week, I should judge.

Q. They were the same stones then that were marked in the patent survey that you set in the original survey of the claim?

A. Exactly.

Q. Did your witness corner have anything upon it except 4–9005 W. C.?

A. Nothing except the stake opposite of it, the side of it.

Q. I asked what was on it, not what was beside it?

A. That was all.

Q. Was there any other mark on it except W. C. 4–9005?

A. Nothing that I remember of.

Q. How far was it from where that corner actually should have been?

A. 35.26 feet.

Q. Did the point where corner number four fell by right lie within the two rails of the track of the railroad?

A. That I can't recollect.

Q. Did it fall within the rails of the track, and if so, how far?

A. Neither can I recollect that.

Q. Was the point where corner number four should fall by right on precipitous ground?

A. What do you mean, natural or artificial?

Q. Either?

A. No, I can't recollect that, neither.

Q. Was it where the proper placing of it was impracticable and dangerous to life and limb?

A. No sir.

274 Q. You could have put a corner where by right this corner fell just as well as to have put a witness corner some distance away, couldn't you?

A. No sir, not just as well.

Q. You could have done it with a little inconvenience, couldn't you?

A. I could have done it but it would not have lasted.

Q. Why wouldn't it have lasted?

A. Because of the traffic on the railroad.

Q. How would it have interfered with it?

A. If it was between the rails.

Q. You say you don't know whether it was or not?

A. I say that it was in the road-bed somewhere; it was either between the rails or on the slope.

Q. Which was it?

A. I don't know but it was on the road-bed.

Q. If it hadn't been between the rails but on the road-bed what traffic would have worn it out?

A. The natural shaking down of the embankment would disturb it.

Q. The natural shaking down of the embankment by the passage of trains?

A. Yes sir, and rolling material.

Q. You could not have put a stake or a monument with sufficient firmness in the ground to have prevented it being shaken down by the passage of trains?

A. Not to prevent it being displaced to a certain extent, if that is the question.

Q. All of those posts or monuments are liable to be misplaced or displaced?

A. But that was more liable.

Q. Then simply because it was more liable to be displaced, you set a witness corner?

A. Yes sir.

275 Q. If it fell within the rails you could have placed a stake there, couldn't you, and have buried it sufficiently deep in the ground so that it would not have protruded far enough to interfere with the passage of trains?

A. Yes sir.

Q. Did you attempt to do it?

A. No sir.

Q. Was there a railroad there at all when you made this survey?

A. Certainly.

Q. When did the railroad reach Cripple Creek?

A. That I don't remember.

Q. Don't you know that it was not until August or September following?

A. That is the town of Cripple Creek; the railroad was running there, if I remember right, running through that particular gulch at that time.

Q. Don't you confuse the grade with the railroad?

A. That is possible; I don't recollect; I know there was a road-bed, but I don't know whether there were rails on it or not; that was four years ago and I have no notes to that effect one way or the other.

Q. You don't know whether the rails were on there or not?

A. I would not be positive of that.

Q. Was the point where this stake or corner properly fell upon the railroad bed or in a cut upon the embankment or in the cut?

A. On the embankment.

Q. What was the height of the embankment?

A. I don't recollect exactly; I should fancy twelve or fifteen feet, somewhere along there.

Q. Was it as high as that?

A. I say I don't recollect exactly.

Q. Which side of the embankment did the corner properly fall on?

A. I don't recollect that, neither.

276 Q. You don't recollect much about it, do you?

A. No wonder. That is four years ago and I have made a few hundred surveys since that.

Q. But you have your notes in your hands, and you were brought down especially last night to testify to this matter; you are a United States deputy mineral surveyor and you don't remember the exact point where this one properly fell?

A. No. I am not supposed to.

Redirect by General JOHNSON:

Q. You may state whether or not that corner would either would have fallen on the road-bed proper or one of the embankments?

A. It would have fallen on one or the other, sure.

Q. The embankments were precipitous ground, were they not?

A. Yes sir.

Q. Did you consider that it was practicable to put that corner post on one of those embankments?

Defendants object; objection sustained, plaintiff excepting.

J. W. CARR, being recalled for the plaintiff, testified as follows:

Q. Can you state whether or not these corners marked as Mr. McNutt has described are still standing there?

A. Yes sir, they were as late as December, and in the early part of January of this year.

Q. Do you remember whether this railroad was in operation in June of 1894?

A. I don't know whether it was in operation up to this point on the road in June 1894 or not; but I know on July 4th, 1894, that it had reached Cripple Creek.

Q. Do you know when this track was laid along by the Tecumseh claim?

A. It was some time before July 4th.

277 Q. What is the height of the embankment of that railroad at this corner number four?

A. I don't remember the exact height; I know it is very close where that corner number four particularly comes, it is very close to a bridge, quite a tall trestle, I should say at least ten feet and it may be fifteen in height.

Q. You say there was a trestle near there?

A. Very close, or a little beyond where the corner would come.

Q. And up to that trestle-work is an embankment?

A. Yes sir, approaching the trestle-work.

Q. I will ask you to state how the railroad runs with reference to this end line of the claim?

A. The railroad comes in about here; corner number four sets about twelve feet below the railroad.

Q. You mean south of the railroad?

A. South of the railroad, yes; the railroad is just about parallel with the end line until it gets nearly to the end of the claim and then it swings around like this; here is the bridge, I should say, and corner number three is a very tall post, it is nearly as tall as a gate post, it is a fine post; I often admire it.

Q. The witness corner?

A. It sets up about twelve feet below the railroad track, and about forty or fifty feet to the west of the wagon road I noted it almost every morning as I would be driving past for the last year.

Q. Then the witness corner sets close to the track, also?

A. Yes sir. I should judge about twelve or probably fifteen feet from the end of the ties.

278 Q. You may state whether or not you could have placed that witness corner up here any nearer this corner without getting on the track itself?

A. No, if it had been placed much nearer it would have been so close to the edge of this high monument that the grade would have fallen down on it, I should suppose, and have a tendency to cover it up.

Q. You may state whether or not it would have been practicable to have put this corner upon the track where it would have come?

A. I would not have considered it so.

Q. Do you know whether that corner, that is, the true corner, would be on the embankment or on the track itself?

A. I don't know.

Cross-examined by Mr. THOMAS:

Q. With reference to the railroad track, where does corner number four rightly fall?

A. I don't know exactly where, only just by estimating it; I never measured it accurately.

Q. Why do you say that it would not have been practicable to have put the post where it rightly fell?

A. It seems to me that if it had fallen within the rails or very close to the rails or the end of the ties that it would have been

liable to have been moved by sectionmen; these embankments are constantly being filled up by gravel trains and I should have supposed that it would have been very impracticable to place the corner there.

Q. Simply impracticable and inconvenient, but it could have been placed there, couldn't it?

A. I don't see any difficulty in the actual placing it there.

Q. The fact that it may have been covered up or may have been removed is the reason why you think it ought to have been placed where it was placed?

A. Yes, sir.

279 Redirect examination by General JOHNSON:

Q. The danger of going upon a railroad track and planting a stone there would depend somewhat upon whether a train was running at that time or not, wouldn't it?

A. Yes sir.

Q. Would, in your opinion, a railroad permit a stone to stand projecting up there on the track?

A. Not if it projected high enough.

Q. Or within the ends of those ties?

A. Not if it was so close to the track that an engine would hit it, or if it projected high enough to interfere with the passage of trains, of course.

Q. How high would a stone have to project above a railroad track to be struck by an engine?

A. I don't know, I am sure; I suppose eight or ten inches, probably, above the center of the track.

Q. Doesn't the cow-catcher of an engine run a good deal lower than that?

A. Possibly; I never measured them with a view of ascertaining that fact.

Q. If the post fell outside of the level made by the ties and this embankment and fell on the slopes of that embankment, would you call that on precipitous ground?

The COURT: I don't think that is competent.

Plaintiff excepts.

And thereupon the plaintiff rested his case.

And thereupon the defendants, to sustain the issues herein on their behalf, gave in evidence as follows:

280 JAMES F. SMITH, being first duly sworn on behalf of the defendants, testified as follows:

(By Mr. THOMAS:)

Q. Mr. Smith, where do you reside?

A. In Cripple Creek.

Q. What is your occupation?

A. Mining engineering and surveying.

Q. How long have you followed that business?
A. For nearly 18 years.
Q. In what parts of the State have you been so occupied?
A. In Lake, Park, Summit and El Paso counties.
Q. How long have you been a resident of and engaged in the pursuit of your profession in El Paso county?
A. For nearly six years.
Q. During all that time have you lived in Cripple Creek?
A. I have.
Q. During that time how extended has been your experience in the matter of familiarizing yourself with the general characteristics of the camp vein formations, geological conditions, etc.?
A. It has been very extensive; I have worked all over the camp nearly all of the time.
Q. And surveyed claims from time to time?
A. I have surveyed claims all over the camp.
Q. From the experience which you have had as a civil and mining engineer in that camp, for the past six years, have you become sufficiently familiar with its conditions to judge of the character of its veim deposits, their existence and non-existence, etc.?
A. I think I have.
Q. Are you acquainted with the ground in controversy between the parties here called by plaintiff the Tecumseh and by de-
281 fendants the Ophir Lode mining claim?
A. I am.
Q. How long have you known of that section of the camp?
A. I think I was first on that ground about the 18th of April, 1892.
Q. For what purpose?
A. For the purpose of surveying the Ophir lode for location.
Q. For whom?
A. I was engaged by John E. Hubbard, I think.
Q. One of the reputed owners of the claim?
A. He was one of the locators or discoverers.
Q. Did you at that time make a survey of the claim?
A. I did.
Q. For what purpose?
A. For the purpose of marking the boundaries.
Q. Please state to the jury how you marked the boundaries and made a survey of the claim at that time.
A. I ran five hundred feet north from the discovery shaft; and at the corners I set posts; one at the northwest and one at the northeast corner and measured down——
Q. Did you run directly north of the discovery shaft?
A. No, it is northeast north, thirty degrees east, as I ran by the needle and I set a post at the center of each side line and one at each off the southerly corners.
Q. What sort of posts did you set at those respective boundaries?
A. I don't remember the kind of wood, but they were posts about four inches in diameter and about three and a half feet long.
Q. Wood or stone?

A. Wood.

Q. How were they hewed, if at all?

A. They were hewn on one side and marked with the corner, northeast or northwest, and the number of the corner, and
282 the name below on the blazed side, which was faced in towards the claim; and the side centers the blazed faces directly towards each other, opposite. The center stakes and the corners, the blazed portion, was set diagonally between the two lines, end lines and side lines.

Q. Did you prepare a location certificate at that time?

A. I did.

Q. For the owners?

A. Yes sir.

Q. What, if any, sign or notice did you then observe at the discovery shaft?

A. There was a notice by the shaft claiming, I think it was five hundred feet northerly and one thousand feet southerly together with one hundred and fifty feet on each side or three hundred feet in width; it was a tolerably lengthy notice; it had the name of the lode and date of discovery, claiming to have been discovered—I forget the date now, but I took a memorandum of it—and embodied it in the location certificate, I think some time in February; and it was signed at the bottom: John Hubbard and H. E. Smith, I believe; I have forgotten the names of the other locators.

Q. H. E. or J. E. Smith?

A. It may have been J. E.; it was the other locator.

Q. It was one or the other?

A. Yes; and I altered that notice, probably hewed off that notice entirely and wrote another one, claiming a definite number of feet north, thirty degrees east, and the balance of 1,500 feet south thirty degrees west; and I also hewed the notice of the name of the claim, Ophir lode, discovered, and the date of discovery that was originally on the notice, which I don't remember now.

Q. Was that date so placed before or after the time of your survey?

A. It was there before I made the survey.

283 Q. Did you at that time make any examination or measurement of what was called the discovery shaft?

A. I did not make a careful examination of the formation in the shaft; I just measured the depth.

Q. You did measure the depth?

A. Yes sir.

Q. What did you find the depth then to be?

A. It was quite or over ten feet. I think it was eleven feet deep.

Q. In what material was the shaft?

A. It was in wash and slide down to about six or maybe eight feet, though the bottom appeared to be in rock in place in porphyry.

Q. Did you at any time afterwards make any other or official survey of that claim?

A. I did make an official survey in June 1892.

Q. State whether or not at that time you were a United States deputy mineral surveyor?

A. I was.

Q. For what purpose was that official survey made?

A. It was made for the foundation for an application for patent.

Q. Did you at that time make any further examination of the discovery shaft?

A. Nothing more than measurements.

Q. What was its measurement at that time?

A. I don't think it had been sunk any deeper.

Q. In June 1892?

A. In June.

Q. When did you see it after that, if at all, when you found it to be deeper?

A. It was late in 1892, but prior to the 16th day of December.

Q. How do you fix that date?

A. I made an affidavit of expenditure of five hundred dollars by the claimants and enumerated the work that had been done
284 by them, and that affidavit is dated the 16th of December, 1892. The field-notes had no date and I don't know just the date that I measured it, but it was prior, of course to the 16th.

Q. I will ask you right there whether the claim was then owned separately or in common with any other claim adjoining?

A. It was owned in common by the same owners as the Julia E., which is north and the Doctor and Chief further north; they made one group.

Q. At the time that you next saw it, which you say was prior to this time in December, 1892, did you measure the shaft?

A. I did.

Q. About what depth had it attained?

A. It was then twenty-eight feet.

Q. How did you measure it?

A. I measured it with a steel tape, standing on the surface and letting the end of the tape down to the bottom of the shaft.

Q. With whom were you at that time associated or by whom were you accompanied, if any one?

A. I think Mr. Hubbard was with me; I am not sure who it was, it might have been Henry Smith; there was some one with me to point out the new work.

Q. How long had you known Mr. Hubbard?

A. I met Mr. Hubbard I think on the 18th of April—the day I make the location survey; possibly the day before, in town; I don't remember about that exactly.

Q. Of 1892?

A. Of 1892.

Q. How long did you know him after that?

A. I saw Mr. Hubbard occasionally, I think, for a few years.

Q. And conversed with him?

A. Yes sir.

Q. Do you know whether or not he was a citizen of the
285 United States?

A. I don't know, exactly, except his appearance.

Q. Was there anything in his appearance or accent in conversation to indicate foreign birth?

A. None at all.

Q. Were there any other claims that he had located or was connected with that you know of.

A. I know that he was the locator of the Julia E.

Q. One of the claims which you have just spoken of?

A. Just mentioned.

Q. When did you next examine or survey or have any connection with the Ophir claim?

A. It was in the early part of May of last year.

Q. In 1897?

A. In 1897.

Q. So that from the time when you made your examination and affidavit of improvements some time prior to the 16th of December, 1892, up to May 1897, you had no active or actual connection with property?

A. Not in the ground; I made no examinations.

Q. Who made that plan map that you have placed upon the board there before you were sworn as a witness?

A. I made it.

Q. What does it assume to represent?

A. It represents the relative positions of the Tecumseh and Ophir as staked and also the work on the ground.

Q. Does it correctly represent those lines?

A. It does.

Q. The yellow-shaded lines represent what claim?

A. The boundaries of the Ophir.

Q. The lines north and south that are broken and over which I run my finger, represent what claims?

A. The boundaries of the Tecumseh.

Q. The other unshaded lines that are red in color, over
286 here, represent what?

A. The Whale, as described in the Whale location certificate.

Q. What do the black spots upon which I place my pointer here, respectively indicate, beginning with this one?

A. They represent shafts; that is the Tecumseh discovery shaft I believe it is so marked.

Q. And this?

A. That is the Ophir discovery.

Q. And this?

A. That is the working shaft made by the Tecumseh claimants; it is marked Tecumseh, I believe.

Q. And this?

A. That is a winze sunk from the 80-foot level in that Tecumseh working shaft; the top of that is 80 feet from the surface.

Q. And what is this?

A. That is a shaft.

Q. It is marked Whale?

A. That was so pointed out there.

Q. It was pointed out as the Whale discovery?

A. It was pointed out as the Whale discovery.

Q. Then you have a working shaft here with a drift running north?

A. That is a shaft that shows that there is a drift in the bottom although I didn't look at that or go into it.

Q. What is this black mark here upon the map?

A. That on the side line of the Ophir, the west side line, is a shaft that was there at the time I made the official survey of the Ophir; at which time it was 25 or 30 feet deep.

Q. What is the other map intended to represent?

A. That is a cross-section through the south end of the Ophir discovery shaft.

Q. Was that made by yourself?

A. It was not made by me; Mr. Moore made that.

Q. Have you checked it up?

A. I have.

287 Q. From your checking and measurements are you prepared to say whether or not it is correct?

A. It is correct.

Q. What is the other drawing on the right and near the bottom of the last-named map, intended to represent?

A. That is a plan of the bottom of the Ophir discovery shaft.

Q. Is there a drift connected with the bottom?

A. There is; it is drifted both ways from the bottom.

Q. Is that designed to show the drift as well, or a part of it?

A. It is; it shows the drift running both ways.

Q. Did you or not, in the month of May, 1897, make any examination of the Ophir discovery shaft?

A. I did.

Q. How long a time did you spend there?

A. I was there two or three times.

Q. Take it altogether how many times?

A. I expect I put in probably a total of six or eight hours in the shaft.

Q. Please describe to the jury in your own way, the condition of the shaft at that time, and what, if anything, you found in it?

A. The shaft I found seventy feet deep from the collar and at the bottom a drift running north and south. There were drifts run almost true north and south, from the bottom of the shaft, diagonally with the shaft. The drift running north runs out over one hundred feet—I forget the exact distance of that—and south, in May it was twenty feet, probably from the shaft where it was filled with waste; I couldn't tell how much further it ran; and coming in at the southeast corner of the shaft, running down the south end, gradually crossing, I found a vein that gradually crosses the shaft and is in the extreme west edge of it at the bottom, and the

288 drift running south from the shaft is started along on the west or hanging wall of this vein, and it follows the vein in

there for a distance and then breaks through the wall and goes over on the other side of the vein.

Q. What do you call a vein?

A. A vein is a body of mineral-bearing rock, separated from the general mass of the mountain or country rock.

Q. Must it be continuous and in place?

A. It must, yes.

Q. When you say separated from the mass of the surrounding or country rock, how must it be separated in order to be a vein?

A. It must be a body to itself; it may be about the same as the country rock, though there is a separation along the line of values if nothing else, a part of it, the same identical appearing rock to the eye, may be rich in the precious metals and just a little from that would be barren, called the country rock.

Q. Is the vein which you found and which you have testified as being in this shaft, bounded by the crack or fissure that appears or is it bounded by something else?

A. It is bounded not by the fissure or crack entirely, although you can notice the limit of the vein beyond that even by the eye; it is apparent in the difference in the rock.

Q. What is the difference in the rock?

A. The vein matter is a different color and more porous apparently, and shows more quartz than the country rock.

Q. What is quartz?

A. Quartz is pure silica, but designated as quartz; it is found with peculiar crystal-ization; it is hard to describe, though recognizable to a man who is used to seeing it.

Q. What is the prevailing country rock of that section?

A. It is porphyry.

289 Q. Is it or not true that the vein filling or the vein matter or the vein stone in that district and on that hill, is largely composed of porphyry?

A. It is.

Q. Is it or not true that the similarity between the porphyritic ore and the porphyry country rock is sometimes so close as to deceive the eye?

A. It frequently is.

Q. Is it or not true that in vein formations on that hill and elsewhere on the camp the values are impregnanted or blended into the country rock or the slips or fissures large or small running through the country?

A. It generally is.

Q. At what distance from the collar of the Ophir shaft does the vein which you have described first appear; that is, where you know it to be?

A. At twenty-one feet.

Q. Did you at any time assist in taking any pieces of rock from the Ophir shaft for the purpose of assaying?

A. I did.

Q. When was that done and by whom were you accompanied?

A. That was done in May 1897, and I was accompanied by Mr. Moore, Mr. Boehmer and Mr. Doyle, the assayer.

Q. James A. Doyle?

A. James A. Doyle; and there was one or two others, I am not sure who.

Q. Was there any other assayer with you than Mr. Doyle?

A. I don't remember any other assayer definitely.

Q. Do you know Mr. Burdette?

A. I know Mr. Burdette, but I don't remember now distinctly that he was with us.

Q. State now in your own way how these samples were taken and from what places in the shaft?

A. They were taken from the bottom of the shaft along this vein up towards the surface; from towards the bottom or at the
290 bottom. There was some taken in these drifts from the vein, and along upon the south end of the shaft, close to the bottom there was just a few taken. As we got up towards the top we took them at more frequent intervals; we took them at about thirty-four or thirty-five feet, thirty twenty-five, twenty-one and twenty-two, along this vein, in the south end and there was some taken along the vein where they shot it out, along the east side of the shaft.

Q. Was there more than one set of samples taken?

A. I don't think there was in my presence.

Q. Do you remember the date upon which the samples which you have testified to were taken?

A. It was, I think, probably about the fifteenth or sixteenth of May; I am not sure of the date.

Q. Do you know whether any marks were made upon the section map of the Ophir discovery shaft here to indicate where they were taken?

A. There were.

Q. What are they? Are they those black marks?

A. Just little straight, short black marks.

Q. How were they taken?

A. They were chipped out with a hand or prospecting pick, along through the width of the vein, in some places just in the fissure and again taking the fissure and rock outside of it; especially near the top it was taken along in the fissure or probably a foot in length. At each place it was put in a sack, tied up and given to the assayer.

Q. Were those taken at arbitrary distance down the shaft?

A. It was irregular; they were near the same distances and particularly towards the top of the shaft or from the twenty-foot point down to thirty-five, I believe they were taken at five feet.

Q. What means were taken to preserve the samples and
291 keep them intact, if any?

A. They were tied up in small sample sacks.

Q. New sacks?

A. Yes sir, they were, and put in a larger ore sack and all kept right together and with all of us during the time we were down in the shaft.

Q. How were they marked?

A. They were marked, I think, starting with number 1 and each sack had a card put in the sack and marked on the sack; I don't remember definitely the method we used, but each sample was numbered from one consecutively up to as many as we got.

Q. What is intended by the red stripe or mark placed upon the section representing the Ophir shaft?

A. That is the vein as it appears in the south end of the discovery shaft.

Q. Why is that color used to designate it?

A. It is used to show it on the section.

Q. Is it a conventional sign with engineers?

A. It is.

Q. Does that vein appear as clearly to the eye in the actual rock as the coloring upon that map, indicating it in the shaft?

A. It does not; there is not the difference in color.

Q. Please state whether the delineation of the vein in that shaft as shown on that section is substantially accurate?

A. It is.

Q. What is the dip of the vein, if any?

A. It is between eighty and eighty-five degrees from the horizontal.

Q. That would make it between fifteen and twenty from the vertical?

A. Between 15 and 10 from the vertical.

Q. State whether or not from your experience there is any difference in the angle of the dip of the vein of the surface as shown in Cripple Creek from what it is further down, if there is any difference?

A. There is nearly always a difference, a difference in nearly all of the veins I know of.

292 Q. Does the difference correspond in any manner to the circumstance of whether the dip of the vein is with the slope of the hill or into the hill?

A. It does generally; but there are some cases I know that seem to be contrary to the general rule.

Q. I am asking, of course, for general features of the matter?

A. Yes; the rule is if the vein dips into the hill that it is flatter near the surface than it is lower down; if the vein dips out of the hill the dip of the vein is the same direction with the slope of the hill; it is a little steeper near the surface than it is lower down.

Q. Is there any reason for that?

A. There is.

Q. What is it?

A. It is probably caused by little slip or travel near the surface of the hill that crowds downhill.

Q. State whether or not in the Ophir shaft from the 21-foot point that you have designated down to the bottom of the shaft there is or is not a continuous vein of metal-iferous bearing ore in place?

A. There is.

Q. Continuous and unbroken?

A. Yes sir.

Q. I will ask you if you have been in the working shaft called by the Tecumseh people number 4?

A. I have.

Q. Upon what vein is that shaft sunk?

A. That is the same vein that is shown in the Ophir discovery shaft.

Q. Is there any connection between the two shafts under ground?

A. There is.

Q. At what point?

A. That drift shown in the bottom of the shaft there on the section plan, the drift running north from the Ophir discovery shaft runs through this Tecumseh working shaft on beyond, some
293 fifty feet. These shafts are fifty-three or fifty-four feet apart, I believe, and that vein or the wall of it is plainly descernible from the time we get to it in the Ophir discovery shaft down to the drift and through the drift entirely into the face of the drift north of the Tecumseh shaft and up through the Tecumseh shaft to a point about twenty feet from the surface.

Q. Is the working shaft sunk upon the slant of the vein or does it go down first vertically and then——

A. The Tecumseh shaft?

Q. Yes, the working shaft.

A. It is vertical about twenty feet. It has been sunk there and they come to the foot-wall of the vein with the east side of the shaft and from there down it follows the wall of the vein.

Q. Have you made any examination of the Tecumseh discovery shaft?

A. I have.

Q. When did you investigate that?

A. I first examined it in May 1897 and again Tuesday, I believe, of last week.

Q. Please describe that shaft in your own way to the jury and tell them what, if anything, you found in it.

A. It was sunk probably eight feet through wash and from there to the bottom at a depth of thirty-seven or thirty-eight feet it is sunk through the porphyry and through the bottom of the shaft there is a drift or cross-cut running east about ten feet.

Q. Are there any cracks or fractures or fissures noticeable in that shaft?

A. There are quite a number of them.

Q. Running in what direction?

A. There are four very plain cracks that are nearly vertical and running on a horizontal strike nearly north and south; and then there are several that are nearly horizontal in different parts of the shaft.

294 Q. What is the difference in their appearance; that is the vertical as compared with the horizontal cracks, of which you speak?

A. There is no difference in appearance at all; they run in different directions, that is all the difference.

Q. State to the jury whether those cracks or any of them constitute a vein or lode?

A. In my opinion they do not.

Q. Why do you say that?

A. The rock on either side of any one of those cracks is identically the same and there is nothing in the way of filling in the cracks; the country rock on either side of the cracks has no actual continuity; the rock is just cracked and not separated so that there is no room for any filling of any kind, excepting knife-blades about where the cracks horizontally and vertically would make a little bit of an opening filled with soft material; but most of the filling is in the horizontal cracks.

Q. Is there or not the characteristic fracture or cleavage to eruptive rock?

A. There is.

Q. Is the eruptive rock like this porphyry liable, or not, to be cracked or broken out near the surface?

A. It is in that district; nearly in all places.

Q. From what causes?

A. It is hard to tell just what has cracked it; it was probably the disturbance of an earthquake shock or the cooling as it was originally deposited.

Q. Are the fractures or fissures shown in this shaft anything more than the ordinary cracks or fractures found in the rock generally?

A. They are not.

Q. State whether or not there is any difference in the appearance and character of these cracks in the Ophir shaft, speaking of the vertical ones, from those exposed on the sides of the railroad
295 cuts in that immediate neighborhood?

A. You mean in the Tecumseh shaft?

A. Yes, I am talking about the Tecumseh.

A. They are the same that are shown in every cut of considerable depth there running through the porphyry.

Q. Is there any difference whatever in the rock that lies between this series of cracks and the country rock or what is called by the plaintiff the country rock?

A. That is the country rock between two of the cracks and the country rock on the other sides?

Q. Yes.

A. There is no difference; it is all the same.

Q. Are the wertical cracks any more persistent so far as exposed than the horizontal ones in the shaft?

A. They are not; there is two of these cracks in that shaft that are shown and exposed a little further than any of the horizontal cracks.

Q. About how many horizontal seams are there?

A. There are at least two very well defined, persistent, running entirely across and around the shaft, shown on all sides; and there are others that are not running quite so nearly parallel to each other as these two I speak of.

Q. What is shown in that cross-drift that is driven to the east from the bottom of the shaft?

A. That cross-cut is run just under one of those horizontal cracks and that crack is the roof of the cross-cut; all the way into the face and the face stops against another vertical crack in the rock.

Q. So that the roof is the top of that horizontal crack and the breast is the east wall between the vertical cracks?

A. Yes sir.

Q. Is either the horizontal crack upon which that cross-drift is driven or the vertical face a vein, lode, or ledge?

296 A. It is not.

Q. Why not?

A. Because there is nothing in the crack; there is a fissure but the fracture in the rock, there is nothing in between the two parts of the rock.

Q. Did you assist or participate in the selection of any rock from that shaft for the purpose of assaying?

A. I assisted in taking some samples there in May 1897.

Q. Accompanied by whom?

A. There were the same parties that were with me in the Ophir shaft when we took those samples.

Q. The same ones that you have already enumerated?

A. I have mentioned them in connection with the Ophir shaft.

Q. State whether they were taken in the same way substantially?

A. They were taken about the same with the exception that in the Ophir shaft we took the matter from between the walls; there was nothing to get from between those walls or out of the cracks; we had to pick the material trying to get what might be the vein from near the cracks; breaking a little off on each side.

Q. How many samples do you now recall having taken?

A. There may have been a dozen; I don't remember; I didn't keep a memorandum of the samples.

Q. State whether or not they were placed in bags and marked as the samples that were taken from the other shaft?

A. They were treated just the same.

Q. Do you know what ultimately became of them?

A. The last I knew of them was when they were given to Mr. Doyle.

Q. The assayer?

A. The assayer.

Q. Were they given to him upon the hill or delivered to him at his assay office?

A. They were; I don't think I carried them to the office;

297 I think he was with us and took charge of them right on the hill; he may have driven down in a wagon.

Q. Where was his office at the time?

A. In Anaconda, at the foot of the hill, below these claims.

Q. You said something about the strike of those vertical cracks being substantially north and south; from what did you make that calculation?

A. From what could be seen of them across the shaft.

Q. Some one has made a mark here running on either side of the shaft; state whether or not that substantially shows its direction?
A. It does.
Q. It would be about that?
A. Isn't there a mark up near your left hand a little more to the west; I think there is a little red line there.
Q. There?
A. Yes.
Q. It would be about like that?
A. That is it; that is what it was put there for.
Q. I wish you would come here and draw a line from that point that would be a hundred and fifty feet distant on the east of it and parallel to it?
A. That is the line.
Q. Upon what side of the line that you have just drawn would the Ophir discovery shaft and workings connected therewith fall?
A. On the east side of that line.
Q. All of them?
A. Yes sir.
Q. You say you examined the Tecumseh shaft again last Tuesday?
A. Yes sir.
Q. In what manner, if at all, had it been changed by additional work or otherwise?
A. There was no change that I noticed except some stulls that were put in to make it easy of access.
Q. No additional work so far as you have seen?
A. I didn't notice any.
298 Q. Please state from your examination of the discovery shaft, whether or not the same discloses any vein, lode or ledge of mineral of rock in place or otherwise?
A. It does not.
Q. Mr. Smith, have you made any inspection of what the plaintiff calls shafts number 2 and 3?
A. Number 2, I believe, is that shaft on the west line of the Ophir.
Q. Is it over here somewhere—about up there?
A. I never examined those shafts by going down in them.
Q. That would not be the shaft; it is further up here; do you know whether it is accessible; that is whether it is open so that you can get into it or whether it is closed up?
A. Yes sir, that is the shaft that is shown on my map.
Q. This?
A. Yes; on the line of the Ophir vein.
Q. That is the plaintiff's number 3?
A. That shaft you could get in by carrying a rope there; it is not fastened up.
Q. Have you been in that shaft?
A. I have not.
Q. You have placed upon the map the position of the shaft and some workings leading north from it to there; did you do that?

A. I placed the shaft there; I located the top of the shaft but I think Mr. Moore platted on that work shown from the bottom of the shaft; that is not mine.

Cross-examined by General JOHNSON:

Q. You first examined this Ophir discovery shaft in the spring of 1892?

A. Yes sir.

Q. It was then sunk a little over ten feet deep, you say?

A. Yes sir.

299 Q. Very shortly after that, I believe in June, you made a survey?

A. Yes sir; an official survey.

Q. For what purpose?

A. For the purpose of applying for a patent.

Q. At that time no further work had been done?

A. I don't think there had; I have not looked at my notes on that but my recollection of it is now that no additional work had been done on the Ophir.

Q. You looked about there to find five hundred dollars' worth of work, did you?

A. I did not.

Q. You knew there had to be that amount of work done to apply for a patent?

A. I did, yes sir.

Q. You were surveying for the purpose of managing the getting of a patent, weren't you?

A. I was.

Q. And still you did not investigate to ascertain whether there was five hundred dollars' worth of work done or not?

A. I located what work there was within the boundaries of the claim, at that time, but I was not hunting five hundred dollars' worth of work; I knew from the claimants' statement that there was not that amount of work on the claim at that time; they informed me of the work on the claim which had been done by them and that work I located and estimated the value of it.

Q. What work did you estimate?

A. The discovery shaft, I think, was all there was at that time.

Q. The discovery shaft?

A. Yes sir.

Q. Then there was no claim made at that time that the Ophir claimants had done any work except this discovery shaft?

A. None that I ever knew of.

Q. You did not proceed with the application for a patent

300 then at that time?

A. I think the application was filed as soon as the survey was approved, some time in August, probably.

Q. Of what year?

A. In 1892.

Q. With no work having been done except this ten-foot shaft?

A. Yes sir.

Q. In support of that application, you subsequently filed an affidavit of work done?

A. I did.

Q. What work had been done then?

A. This discovery shaft had been sunk to the depth of twenty-eight feet; there had been another shaft sunk ten feet deep and an open cut down on the southerly part of the claim, not far above where the railroad is now, run in some thirty or thirty-five feet.

Q. A shaft twenty-eight feet?

A. Yes sir.

Q. Another shaft ten feet; where was that located?

A. That was just south of the discovery shaft.

Q. How far away?

A. Twelve or eighteen feet; somewhere between 12 and 20 feet, I believe.

Q. 12 or 18 feet away?

A. Yes sir.

Q. Is that shaft there yet?

A. I presume it is there but it is filled with the dump from the Ophir discovery shaft.

Q. Then you found an open cut; where was that?

A. That is down near the southerly end of the Ophir claim.

Q. How much of a cut was that?

A. That cut, as I remember it, was about thirty feet long, about five feet wide and twelve or possibly fifteen feet deep at the face.

Q. Near the south end?

A. Yes sir.

Q. Who told you that was made by the Ophir people?

A. Whoever was with me at the time; whether it was
301 Hubbard or Smith or who it was; I don't remember; I know it was some one who was interested in doing the work and was there for the purpose of pointing out the work to me.

Q. There is another shaft there on your map; did you estimate that shaft?

A. That shaft that is near the center of the west side line of the Ophir?

Q. Yes.

A. No, I didn't put that in the estimate.

Q. Then you estimate this work at $500?

A. $500 possibly a little over; I don't remember the exact amount of the estimate.

Q. But the survey itself was made upon this ten-foot hole?

A. At the time the official survey was made, I think that ten-foot hole was all the work that the claimants had put on their claim.

Q. At that time, then, you didn't see this other hole, twelve or eighteen feet away?

A. I don't think it was there; I don't remember it definitely.

Q. If there was ever such a hole there then it was sunk between the two surveys?

A. It was sunk between the time the official survey was made

and the time of measuring the work, about the 1st of December, 1892.

Q. You speak of that shaft upon the side there as being twenty-five feet deep, I think?

A. Yes sir; my recollection is that it was 25 or 30 feet.

Q. Did you go down in it?

A. No, I did not.

Q. Was it somewhat caved in?

A. No, it was a new shaft.

Q. A new shaft?

A. Yes; it hadn't been caved a particle.

Q. Wasn't it forty-three feet deep?

A. No.

Q. Did you measure it?

A. I don't remember if I measured it; I think, though, I
302 measured it at that time with a tape; let the tape down and there was parties working in there at the time.

Q. At what time was that?

A. That was in June, 1892.

Q. That was at the time that you were surveying there for a patent?

A. Yes sir.

Q. At the time you examined this Ophir shaft you say it was one hundred feet deep and a drift out over one hundred feet?

A. I don't think I said that, Mr. Johnson.

Q. I mean at the time you examined it here in May?

A. I said it was seventy feet deep.

Q. That is what I stated; and a drift north over one hundred feet?

A. Running north over one hundred feet, yes.

Q. Whose drift was that?

A. I don't know who made that drift or all of it.

Q. Don't you know that it passes right under the working shaft?

A. It does pass right under the Tecumseh shaft.

Q. The working shaft?

A. Yes sir, the Tecumseh shaft runs right down through that level on below it.

Q. So you don't know who made that drift?

A. No.

Q. Or what portion of it was made by the respective parties?

A. I do not.

Q. Then you found a drift about twenty feet south from the Ophir discovery shaft?

A. Yes sir, it was open for about twenty feet, the balance of it filled with waste.

Q. And you say you found a vein in the southeast corner of that discovery shaft?

A. Yes sir.

Q. Does that red line there represent the southeast corner of the shaft?

A. That line, yes; the upper part of the red line represents
303 the southeast corner, assuming the length of the shaft to be north and south, but it is not true north and south.

Q. When you reach a point about 34 feet from the surface, that vein is plainly visible, isn't it?

A. Yes sir.

Q. Isn't it a fact that you can stand in the bottom of that shaft and see that vein distictly all the while right up to the point 34 feet from the surface?

A. Yes sir, you can see it up that distance very distinctly, and at about thirty-four feet you can see the foot-wall of the vein remaining along the easterly side of the shaft exposed for quite a little distance; it is not north from the southeast corner; it is not right in the corner.

Q. From a point thirty-four feet below the collar of the shaft down to the bottom of the shaft there would be no controversy between any reasonable persons, would there, as to the existence of a vein?

A. I don't see how there could be any.

Q. Didn't you perfectly understand from your employers at the time you were examining that vein or that shaft, for the purpose of the former trial of this case, that there was no dispute about there being a vein below the 34-foot point?

A. I don't remember of having any conversation with them at all concerning whether there was or was not a dispute below there.

Q. You don't remember hearing that matter spoken of?

A. Before the former trial?

A. Yes?

A. No; I do not. I thought it was very plain, if I gave it a thought; I didn't think there would be any dispute whether there was a vein in the bottom of that shaft.

Q. Standing at the bottom of that shaft and looking up, can you not distinctly see that vein go into the wall at a point thirty-four feet from the surface?

A. No, you cannot.

304 Q. Can't you see it as distinctly above that point as you can below?

A. You can see it just as distinctly above that point for a considerable distance as you can below that.

Q. What do you mean by a considerable distance?

A. 8 or 10 feet you can see it as plain although you can't see both walls; it is not as plain in that respect; up to 34 feet or about thirty-four feet you can see both walls; then in the end of the shaft and from there up the vein is really left right in the corner of the shaft and the hanging wall can be seen along up to a point 24 or 25 feet, I think.

Q. Doesn't the hanging wall disappear into the side of that shaft just as distinctly and plainly as the foot-wall does, so far as the eye can see?

A. No; you can see the hanging wall on above that point and the foot-wall you cannot see above that point.

Q. How far can you see the hanging wall above that point?

A. You can see the hanging wall, well defined and distinct, up to a point that is about 25 or 26 feet, maybe, below the collar of the shaft; and from there up the crevice is not so plain; it is just the vein matter that shows without a plain crevice between the vein material and the country rock.

Q. How thick is that crevice at the 34-foot point or how wide is the crevice?

A. It is thin; I haven't it in my mind very clear now; my recollection is not clear of the thickness of it at that point, but it is probably an inch or an inch and a half.

Q. The crevice is?

A. Yes sir.

Q. That crevice is filled, is it?

A. Yes sir.

Q. With mineral?

A. It is.

Q. Of a darker substance than the country rock?

A. Yes sir.

305 Q. So that the hanging wall and the foot-wall are only a few inches apart?

A. That is true.

Q. Doesn't that crevice disappear; isn't it running on an angle so that it disappears right into the side of the wall—the crevice itself?

A. One wall does, but the hanging wall of that crevice remains in sight there above that point, as I said before.

Q. How wide did you say that crevice was?

A. An inch; possibly 2 inches; it is thin; it is not above a few inches in thickness.

Q. If the foot-wall, then, of that crevice would disappear at 34 feet from the surface how high would it be to where the hanging wall disappeared, the two walls being but an inch or two apart?

A. That depends altogether on the dip of the vein; if the dip were constant and the wall perfectly straight and the side of the shaft vertical, it would disappear a few inches above; I would have to calculate that to know the exact width of the vein; but the dip of the vein might change so that that would go partially into the wall of the shaft, the foot-wall, and dip and come entirely out again. In this case it does not; it gets steeper near the top and follows along in the corner of the shaft; the corner of the shaft is not perfectly vertical.

Q. Isn't the dip of the vein consistent from the bottom of the shaft to the 34-foot point?

A. It is not regular.

Q. In what respect isn't it regular?

A. It is flatter near the bottom of the shaft than it is higher up; the dip is more from the vertical.

Q. You spoke of the dip being 80° to 85°?

A. Yes sir.

Q. It would make considerable difference whether it was
306 80° or 85°, wouldn't it?

A. Yes sir, it would make a difference if the vein were perfectly straight down the shaft; a dip of 85 degrees might have the vein remain in the shaft all of the way up and a dip of 80° have it disappear from the shaft; I am just estimating the average dip of the vein without measuring it.

Q. Did you measure that dip?

A. I did not measure it.

Q. That vein, as you found it, is a true fissure vein, isn't it?

A. I think it is.

Q. That is to say both walls are porphyry?

A. Both walls are porphyry.

Q. And there is no difficulty for any one to distinctly see that vein with the naked eye, the crevice, the vein filling and the walls and everything from 34 feet down, is there?

A. No, from 34 feet down you can see both walls and the vein in the south end.

Q. You say that the country rock in the vicinity of a vein of that kind is liable to be impregnated with mineral?

A. Yes sir.

Q. That impregnation might not be visible to the naked eye?

A. That is true; it may be richly impregnated with the precious metals from the vein and still not be apparent to the eye.

Q. Would that impregation where it occurs be more likely to be below the foot-wall than above the hanging wall?

A. I think not; especially in a vein that is so nearly vertical; if the vein is flat it looks reasonable that the lower wall would be more impregnated; but it don't seem to be the case.

Q. The tendency of mineral is downward, isn't it, being a heavier substance than porphyry?

A. Yes sir, the tendency of the solid, the molten ore, would be downward, of course, downward through the porphyry.

307 Q. Wouldn't that be a reason why the country rock below the foot-wall would be more likely to be more impregnated than the country rock above the hanging wall?

A. If it was impregnated by having the gold fused and the rock partially fused, it would probably be down; but it is hard to tell in what manner the impregnation occurs; there can be a great many theories, but none of them can be positively demonstrated.

Q. Why did you, in taking those samples from that vein and from that shaft, confuse the investigation with reference to that vein from the point 34 feet down where it distinctly appears and the upper portion of the vein from 34 feet from the surface up where it was in dispute?

A. Why did I confuse the two sets of samples you ask?

Q. Yes?

A. I don't understand that was done; the samples were kept separate as long as I had anything to do with them.

Q. Who picked off the rock that composed those samples?

A. I picked some of it and Mr. Moore picked some of it; there

were probably three of us; I don't remember distinctly just who took part in picking it off; I know that I did some of it but not all.

Q. Don't you remember that Mr. Dahl was there and used the pick?

A. Mr. Dahl was there and probably used the pick, although I don't distinctly remember that he did.

Q. Didn't he do the most of the picking?

A. No, he did not.

Q. Some one would pick some and put it in the sack, and somebody else would pick something and put it in the sack; is that true?

A. Some one would pick the sample away from one point, maybe I would pick the next sample, and probably some other one would be above me about where the next sample would be taken
308 and that man would take the pick and pick off the sample. We were not particular as to which of us picked them loose.

Q. And these different samples would be put in the same bag?

A. They would be put in a small sample sack and tied up; then the sample sacks were put in a larger sack to keep them together.

Q. In other words, most every one who was there on that occasion had free access to those sample sacks so far as the picking and placing of ore in them was concerned?

A. Yes sir, each man had a hand in it; but there was no one, while we had it in the crowd had any access to the sacks to put in more ore in them after we had taken the sample and tied up the sack.

Q. But while those sacks were open and there was promiscuous picking and putting ore in them any one could have put ore from another source in them if he wanted to?

A. No, he couldn't have well done that because there was not room for only about two men to be close to the sack and in reach of it during the time we had it open.

Q. You say there was not more than two men to put ore in the same sample sack on that occasion?

A. I don't think more than two put it in any one sack.

Q. Do you know that to be a fact?

A. I don't know it to be a fact; there might have been some places where three men could, but these samples, every one of them, was picked loose by one man and another man held the sack; and the one picking it there picked it loose in his hand and put it in his hand, or the sack was held up close to where he was picking and the ore fell in the sack; each sample was taken, practically, by two men only.

309 Q. You didn't keep any supervision over the other men, what they were doing, did you?

A. Yes sir, I think I did.

Q. Over every sack that was being made a sample of there?

A. Yes sir.

Q. How many sacks were used?

A. I don't remember just how many samples were taken; I didn't keep a memorandum of the samples.

Q. Did you pick samples more than once?

A. I don't remember that I did; I don't remember of picking samples at separate times.

Q. You took samples, you say, along that fissure and from out of the fissure?

A. Yes sir.

Q. Did you find any fissure in that shaft above 34 feet to take samples out of?

A. I did; I found it there.

Q. What do you mean by fissure?

A. A fissure, when we speak of it in connection with mining is a fissure that is filled with ore; most any crack is a fissure.

Q. A fissure is simply a crack in the porphyry, isn't it?

A. Yes sir.

Q. Just like that wall would crack up and down; that you would call a fissure?

A. That would be a fissure.

Q. That would have two walls, wouldn't it?

A. Yes sir.

Q. This fissure does have two walls?

A. Yes sir; in connection with mining, when I speak of a fissure, I mean a fissure in the rock that is filled with ore.

Q. And you found a fissure up, as I understand you, to 21 feet from the surface that you took ore out of?

A. Yes; but at a point from 21 or 22 feet down to about 26 feet, the wall of that fissure is not plainly discernible to the eye as a crack though it is discernible from the difference in the appearance in the rock.

310 Q. Is there any crack there, any signs of a visible crack, with two walls above 34 feet?

A. The crack of fissures above about 34 feet does not show both walls in the corner of the shaft; it only shows one.

Q. Does it show either wall?

A. It does.

Q. How high up?

A. It shows it up, I think, to about 26 feet I have not got the exact measurement of that in my mind; it shows up I think quite that high, 26 feet from the surface.

Q. You mean it shows one side of the fissure up that high?

A. Yes sir.

Q. You are not speaking now of impregnated country rock?

A. No, the hanging wall of the vein shows up to about that point.

Q. Then one of the sides of this crevice you claim shows up to 26 feet from the surface?

A. Yes sir.

Q. One of the walls of this crevice?

A. One of the walls of this vein that is traceable from the bottom of the shaft up to that point where both walls show at 34 feet, and from there up to about 26 feet the other wall is plain.

Q. Now you found, you say, some cracks in the Tecumseh shaft; you did say this, did you?

A. Yes sir.

Q. But you could not find where they were apart; that is where the walls were separated from each other in any of those vertical cracks?

A. They were separated just a little near where they crossed the most persistent horizontal cracks.

Q. As I understood you to say, you could not find where the walls of these cracks separated enough so that anything could be between the two walls?

311 A. I said they were nearly all the way through their entire length in actual contact, except where the horizontal and vertical cracks crossed; and near that there was a little separation which was filled with the soft material mostly in the horizontal crack.

Q. Speaking of these crevices in the Tecumseh discovery shaft, are they well defined?

A. They are.

Q. Are they continuous so far as they can be seen?

A. Yes sir; one of them is continuous from the surface of rock in place down to the bottom of the shaft; the others don't show that far; the westerly one runs into the wall of the shaft up probably eight feet from the bottom.

Q. Are they all continuous so far as they can be seen?

A. Yes sir; they don't cease anywhere as long as they remain or the line of crack remains in the shaft.

Q. I mean they are continuous so far as they are exposed?

A. Yes, sir.

Q. In the shaft?

A. Yes sir.

Q. Are those crevices parallel with each other?

A. Nearly.

Q. If those crevices carry mineral that will assay in appreciable quantities, would you call them veins?

A. Yes; if there is any appreciable quantity there; any appreciable quantity of precious metal, I would have to call it a vein.

Q. Do you know how those crevices were made?

A. No, I do not.

Q. Have you any opinion?

A. I have an idea as to how they could be made.

Q. They could be made by an upheaval of the earth, could they not?

A. Yes; they could be made by the contraction of rock, in cooling a little slower there than it was in some other places; as it compacts and cools it cracks.

312 Q. Whether they were made by the cooling of the surface of the earth or by some convulsion of the earth, the same process that made them would be likely to make these horizontal fissures, would it not?

A. Yes sir.

Q. The existence of these horizontal fissures, does not detract from

these other vertical fissures, so far as their character as veins are concerned, does it?

A. No, I think not.

Q. Don't you find these horizontal fissures in most all veins?

A. You do.

Q. In most all shafts?

A. You find them all through the country there, horizontal and vertical.

Q. You find these horizontal cracks and joints in the porphyry almost wherever you find vertical cracks?

A. Yes sir.

Q. Whether there is a vein or not?

A. Yes sir; you find both of them, horizontal and vertical, most anywhere around in that country.

Q. Do you know how the ore got into those veins?

A. No, I do not.

Q. Wherever there is ore?

A. No.

Q. Have you any opinion about it?

A. I have no definite opinion; all theories are about the same to me; they are not thoroughly reasonable.

Q. Do you know whether it came from above or below?

A. I do not.

Q. Do you know whether it was deposited there by thunder, lightning or storm?

A. I know it was not deposited by thunder or lightning, either.

Q. Have you any idea whether it was deposited there by water or not?

A. I don't think so, though I know it is possible.

313 Q. What is your theory as to how it got there?

A. My theory is that it got there at the same time that the filling of the vein did and probably it came from below; it might possibly have run over, as a subsequent eruption; it may have been cracked and forced up from below and this ore came right along with the rock that filled the vein; that theory has got just as little foundation as any other theory.

Q. I don't think you have stated exactly how it gets there.

A. I think I stated if it came there by being forced up from below after this crevice was made down through the surface of the earth, it was still molten and the material forced up in there from below; that states how it got there. If the crevice was made in the crust of the earth open on top and the eruption of lava at that time flowed over the surface, and ran down into that crack, I think that is stating how it got there if it got there in that way.

Q. Isn't it now admitted practically by all scientific men that these ores were deposited by water?

A. No.

Q. Either coming from above or below?

A. No, I don't think it is admitted by all of them; that is a plausible theory; it is as plausible as any.

Q. If, then, you could be taken into that shaft and shown crev-

ices and ore that you could pick down and see, running from one to four or five dollars, you would pronounce those crevices veins would you not?

A. It would depend on the extent of the crevices a great deal; I would not call a crevice that might run three or four or eight or ten or possibly twenty feet that was filled with some vein
314 material that might assay a few dollars, a vein; it is not extensive enough.

Q. How far do you have to follow a well-defined crevice and find it bearing gold in appreciable quantities before you would be ready to pronounce it a vein?

A. I have no definite distance fixed in my mind; for my satisfaction if it ran twenty or thirty feet and was four or five feet wide and carried a large amount of precious metal, I think I would call that a vein.

Q. Is that the standard you always testify by?

A. That is my idea; a man can't fix just the definite length of some crevice or crack that might bear ore for the limit of a vein; anything longer than that would be a vein and anything shorter not a vein.

Q. Haven't you testified in this case that you found a well-defined vein in that ten-foot hole in the Ophir claim when you first looked at it?

A. No.

Q. Haven't you testified that you found a discovery in it of a vein?

A. No, I never testified to that; I know that my testimony has been that I never examined it carefully at all at the depth of ten feet; I just looked down in it.

Q. Then you would have to pursue a crevice from 30 to 40 feet and find it bearing mineral all the way before you would pronounce it a vein?

A. If a crevice would continue that distance and was not played out yet or entirely cut off I would think in all reason it was a vein.

Q. This shaft is 38 feet deep?

A. Yes sir, I believe that is the depth of it.

Q. And one of those crevices comes in about where the wash stops?

A. Yes sir.

Q. And continues regular down?

A. It does.

315 Q. If that crevice bears assaying ore at different points from where it is discovered to the bottom of that shaft would you not call it a vein?

A. Yes, I would consider that was a vein.

Q. You testified that these crevices were not veins because you could not find anything in them?

A. That is it, exactly.

Q. And the material that you took to assay was taken away from these crevices?

A. I could not get any material in there in the crevices; it was not in it.

Q. From what portions of these crevices did you take your material?

A. I probably broke off the country rock there for a distance of an inch on each side of the crevice.

Redirect examination:

Q. In the samples that you took or helped to take was there introduced any material except that which was actually picked from the shaft?

A. There was none.

Q. In taking the samples you say that several participated in the picking; did more than one pick the material for any one of the several samples that were selected?

A. No sir; each sample that was picked was picked altogether by one man.

Q. And the bags in which it was placed were held by another?

A. Yes sir.

Q. And that was true, was it, with each of the shafts?

A. That was true as to every sample taken.

Q. Did you notice any other fractures in the Ophir shaft either above or below the 34-foot point than the one which you call the vein?

A. Yes sir, there are quite a number of them.

A. Are they the ordinary fractures that occur in the rock there?

316 A. They are.

Q. Do they bear any resemblance to the fractures you testified to in the Tecumseh shaft?

A. They do.

Q. You were asked whether if these crevices in the Tecumseh shaft carried metal or gold in appreciable quantities you would call them veins; would you say if those cracks in some one particular place or two particular places close together, within four or five feet of each other gave an assay value and are barren the rest of the way, both above and below, you would call them veins?

A. No; I consider it very probable and it is generally the case, that any of those cracks will at some point have a little material that will assay that might have come from the surface.

Q. Is the continuity of the vein matter essential to your definition of a vein?

A. Yes sir.

Q. Is it or not a fact that the surface rock in places there will be found material that will assay appreciable quantities of gold, not connected with a vein at all?

A. Yes sir, it is frequently the case; there particularly.

Q. Is it or not a fact that these isolated places where samples could be obtained which assay have any reference to a vein whatever?

A. It is a fact that they have not.

Q. The $500 worth of work about which you were asked and which had reference to the patent application, if I understand you correctly, was estimated about the first of December, 1892?

A. It was.

Q. And not at the time that you made the survey for patent?

A. No, at the time we made that survey, if I remember right, there was only that ten-foot discovery shaft.

317 Q. Who assisted you in making that patent survey?

A. I think my assistant was a man by the name of Wilder.

Q. It was not H. E. Smith?

A. No sir, I don't think he was on the ground while I was at work on that survey.

H. P. DAHL, being first duly sworn on the part of the defendants, testified as follows:

Q. Where do you live, Mr. Dahl?

A. In the Cripple Creek district.

Q. What is your business?

A. Mining.

Q. How long have you followed the business of mining?

A. About 20 years.

Q. How long have you been in Cripple Creek?

A. Something over five years.

Q. During that time have you been engaged in active mining?

A. Yes sir.

Q. On what claims have you worked?

A. On Bull hill and principally on Raven hill, on the Doctor mine, the Chief and Ophir.

Q. In whose employ are you at the present time?

A. The owners of those properties.

Q. Do those gentlemen own the Ophir claim that is here in controversy, too?

A. Yes sir.

Q. How long have you been engaged with the defendants in this case?

A. 4 years last October.

Q. During that time have you been acquainted more or less with the Ophir Lode mining claim?

A. I have.

Q. When did you first know of such a claim?

A. Some time that month, in October, 1893.

Q. Of what year?

A. 1893.

318 Q. Did you at that time have occasion to make any inspection or examination of the property or when did you first become familiar with it by actual inspection?

A. Some time from the middle to the latter part of October.

Q. Of what year?

A. Of that year.

Q. What was, at that time, the condition of the discovery shaft as to depth?
A. Of the Ophir?
Q. Yes.
A. I didn't measure it at that time; just judging the distance I thought at that time that the shaft was about forty feet deep.
Q. You didn't measure it?
A. No sir.
Q. When did you examine the shaft?
A. In May or June, 1895.
Q. Who were with you at that time, if you now recall?
A. The two men that I put to work there to clean out the shaft.
Q. Who were those men; what were their names?
A. Henry A. Johnson and F. S. Mears.
Q. That was in May or June, 1895?
A. Either the latter part of May or the first of June, I don't remember which.
Q. How long were they engaged in cleaning out the shaft?
A. About three days; we paid them by the day's work and after that we let them a contract.
Q. Did you measure the shaft after it was so cleaned out?
A. Yes sir.
Q. What was its depth?
A. 28 feet.
Q. From what point on the surface did you make your measurements?
A. From the top of the old collar.
Q. Do you know whether in cleaning out the shaft any new rock was broken or whether the debris that had accumulated
319 there was taken out?
A. That was all.
Q. Which?
A. The debris and snow and ice was just taken out; that was all.
Q. Was the shaft afterwards sunk to any greater depth?
A. We let a contract of forty odd feet.
Q. From that point?
A. From that point, yes sir.
Q. So as to make it how deep in all?
A. About seventy feet.
Q. To whom was that contract let?
A. Mears and Johnson.
Q. Do you recall ever seeing the contract?
A. I have seen it, yes.
Q. I show you a document, "Exhibit A 1" and ask you if that is the contract to which you refer?
A. Yes sir, that is the contract.
Q. In pursuance of that contract to what depth was that shaft sunk and when, as near as you can remember?
A. To what depth from the collar?
Q. Yes, you can state it that way if you want to?
A. About seventy feet.

Q. About when was it sunk?
A. Some time about the first of June or August or September; I don't remember just exactly what time.
Q. Of what year?
A. That same year, 1895.
Q. Was any other work done upon it?
A. After the contract was finished drifting was started.
Q. That same year?
A. Yes sir.
Q. During that time was any ore removed from the shaft or the drifts and shipped?
A. Yes sir.
Q. Can you state whether from the shaft or from the drifts or both?
A. Both.
Q. What amount of drifting at the bottom of the shaft was
320 done that year?
A. About fifty feet in a northerly direction on the vein and 30 or 40 feet, I don't remember just how far the other one was.
Q. Was any work done upon that claim or within its boundaries within 1896?
A. Yes sir.
Q. Where?
A. In the drift going north.
Q. About when was that work done, and how much?
A. It was made in the summer of 1896; I believe I drove the drift 15 feet.
Q. What was the value of that work?
A. I couldn't say.
Q. Was it worth one hundred dollars?
A. It was worth more than that according to the contract we let on the shaft for sinking.
Q. Was it or not in your judgment as a miner one hundred dollars' worth of work?
A. Yes sir, more than that.
Q. What work, if any, was done in the year 1897?
A. We drove the drift going south in 1897, as well as pulling out a great deal of waste that had been stored away.
Q. What was the fair value of that work that was done in the south drift in 1897?
A. We worked 33 shifts with two men.
Q. What are wages there?
A. $3.00 a day.
Q. For each man?
A. Yes sir.
Q. Did they work full shifts?
A. Yes sir; that is what we paid them for.
Q. And that, you say, was in the extension of the drift south?
A. Yes sir.
Q. Besides doing that you say there was some waste hoisted from the debris?

A. Yes sir.

Q. Does the north drift pass anywhere the Tecumseh shaft
321 number 4 or what the plaintiffs call the working shaft?

A. They broke into the drift, the Tecumseh people.

Q. You mean the Tecumseh shaft in being sunk downward came into the drift or the drift came into the shaft?

A. It was sunk into the drift.

Q. And at about what distance was it from one shaft to the other?

A. About 40 feet.

Q. Is there any obstruction or obstacle in that drift between the two shafts?

A. There is a barrier put in there consisting of three logs standing up and down in the drift next to the Tecumseh shaft.

Q. So as to prevent passage one to the other?

A. Yes sir.

Q. Who put them there; did the defendants put them there?

A. A man by the name of Parks, I believe.

Q. Working for the defendants or the plaintiff?

A. Working then I believe in the employ of one Hawkins.

Q. It was not done by the defendants?

A. I presume it was; I don't know.

Q. I say it was not done by the defendants?

A. No.

Q. Have you since that time had occasion to examine the Ophir shaft and drifts connected with it?

A. Yes sir.

Q. About how frequently have you done so?

A. I was there three or four times last May; I think four times.

Q. Have you been there since?

A. Yes sir; I have been there quite frequently since.

Q. With whom did you make the first examination in May, of 1896? If with any one?

A. I think with Moore, Boehmer, James F. Smith and James A. Doyle.

322 Q. Do you know Mr. Burdetts and Mr. Mitchell?

A. Yes sir.

Q. Were they or either of them along?

A. I don't recollect whether Mr. Burdette was with us the first time or not; I know he was with us the second time.

Q. Now please tell the jury what sort of rock that shaft is sunk in, and whether or not a vein is exposed in that shaft and if so, where it can be seen?

A. That shaft is sunk in the porphyry to the depth of 70 feet, and there is a vein exposed in that shaft from a point about twenty feet below the collar of the shaft, the present collar, and it continues on to the bottom, so far as we have gone on the shaft; we have got good values all the way down from that point.

Q. What is the depth of the wash upon that hill at the point where that shaft is sunk—about?

A. About 6 or 8 feet.

Q. Is the shaft timbered at all?

A. Yes sir, it is timbered.

Q. For about what distance from the surface?

A. About 16 feet.

Q. Did you, during the time of your examination in May, take or assist in taking any samples?

A. I did.

Q. Who were with you at the time they were taken?

A. Those parties mentioned.

Q. Was more than one lot of samples taken, or one line?

A. Yes sir; there was more than one, but not at that time.

Q. Taking the first time that any samples were taken, please explain to the jury how they were taken and by whom and from what places in the shaft?

A. We took samples from the 20 or 21 foot point down in irregular places; and down in the drift each side of the shaft. And we took one sample in the northwest end of the shaft and one on the southwest side of the shaft.

323 Q. This was the first line that was taken?

A. This was the first line that was taken of samples.

Q. How were they broken down?

A. With a pick.

Q. How were they got and preserved?

A. One man held the sack under them and we dropped them into the sack.

Q. Was there any particular man who did the picking or any particular man who held the sack?

A. We kind of changed off in picking the samples.

Q. What do you mean by that?

A. The one that was above me would take a pick and pick a sample and when a sample was taken where I was, I would pick it and hand the pick to the next man below me.

Q. You were strung along above and below each other, were you?

A. Yes sir.

Q. In what sort of bags were those samples put?

A. Regular sample sacks—new sacks.

Q. Maybe the jury don't know what a sample sack is.

A. It is a small canvas sack for the purpose of taking samples in it out of a mine.

Q. Were the sacks new or had they been used before?

A. They were new sacks.

Q. New and perfectly clean?

A. Yes sir.

Q. Was there anything placed in the sack except the samples actually broken?

A. No sir, I don't think so.

Q. In any instance?

A. No sir.

Q. What was done with them after they were placed in the sacks and the sacks tied?

A. They were tied up and given to Assayer Doyle.

Q. You spoke about taking another line; when was that taken?

324 A. That was in the same month; a little later.

Q. Who took those?

A. I was with them and I forget who was all with us; there was four or five of us there; the two assayers were there, however.

Q. Both of them?

A. Yes sir, Mr. Burdette and Mr. Doyle.

Q. What was done with the samples on the second occasion?

A. The same as the former.

Q. Which assayer were they given to?

A. Both; there were duplicate samples taken at that time.

Q. Was there any difference made in the selection of the sample at the 20 or 21 foot point that was given to Doyle and that which was given to Burdette?

A. Doyle's samples were confined to the southeast corner entirely.

Q. At that point?

A. Yes, and Burdette's were taken all around the shaft.

Q. Were there any differences as to the method of taking the other samples between the two that you now recall?

A. I think that Burdette's were taken about the same as Doyle's; I would not be positive.

Q. Were those samples broken with the same care?

A. Yes sir.

Q. And preserved with the same care?

A. Yes sir.

Q. And placed in the same kind of sacks?

A. Yes sir.

Q. For what purpose were they taken?

A. To show the continuity of the vein.

Q. What is the characteristic or common vein filling on that hill within that camp?

A. Porphyry occasionally mixed with quartz.

Q. How does the porphyry compare in appearance and texture with the country rock?

A. It is somewhat similar.

325 Q. Is it or not a fact that the mineral from the fissures goes into the walls and shades off, making the walls in some places good shipping walls?

A. Yes sir.

Q. That is a common thing, is it?

A. That is a common thing; I have known it to go as high as 15 or 16 feet away from the vein in the country rock.

Q. When that is the case what test have you to determine where the country rock is and where the ore is?

A. By assays.

Q. Is it or not a fact that the similarity between the ore and the country rock sometimes leads a miner away from his vein?

A. It does; it has done so quite often.

Q. What is the character of rock surrounding the crevice, the

actual crevice in the Ophir discovery shaft as to whether it is mineral-bearing or otherwise?

A. It is mineral-bearing.

Q. Carrying what sort of mineral?

A. Gold.

Q. When did you first know of the Tecumseh discovery shaft?

A. In May 1895.

Q. Did you have occasion to look at it at that time?

A. Yes sir.

Q. How did you come to do so?

A. For the purpose of familiarizing myself with their discovery and testifying on the last case.

Q. You said in May 1895; do you mean May 1895 or May 1897?

A. May 1897.

Q. It was at the same time that you took these samples, in other words?

A. Yes sir.

Q. Now did you at any time before that go to that shaft with Mr. Cone for the purpose of putting up a notice?

A. I did.

Q. When was that—about when?

A. I think it was in 1894.

Q. Where did you put it with reference to the shaft?

A. We put it right on the windlass frame upright.

326 Q. Was it in writing?

A. It was in writing; Mr. Cone wrote it.

Q. What was the substance of that notice as near as you can remember?

A. It was a kind of warning, stating that they were on the Ophir ground, and to desist from any further work.

Q. Was it signed?

A. It was signed by Mr. Cone.

Q. Any one else?

A. Mr. Robison, I think.

Q. The other defendant?

A. Yes sir.

Q. At the time you examined the shaft in May 1897 who was with you as near as you can now recall?

A. James F. Smith, Mr. Boehmer, Doyle, myself and I think Mitchell and McAllister.

Q. How careful an examination was then made of the shaft?

A. We made a very careful examination of it.

Q. How was the shaft arranged so that you could make the examination, at different places or anything of that sort?

A. The ladder only went down a short distance on the first trip there, but we went down to the bottom with a rope; however, the next time we went there I had timbers put in there by men that were working on the Doctor mine.

Q. So that the examination could be made more easily?

A. Yes sir more easily and more thoroughly.

Q. Now tell the jury in your own way what that shaft disclosed,

beginning at the top and going down to the bottom; what it is sunk in, etc.?

A. The shaft is sunk in the country rock; the formation of the camp; it discloses nothing in the way of a vein; there are several parallel seams running down, beginning at the bottom of the timbers; one that runs clear down to the bottom and the others are not so distinct clear down.

327 Q. What are those seams?

A. They are cooling cracks, joint planes caused from the heat and cold and fractures.

Q. Are they or not common to the porphyry rock of that neighborhood?

A. They are.

Q. Are there any other places in that vicinity where you see such cracks exposed?

A. Anywhere; especially on the Florence and Cripple Creek railroad, wherever a cut is run through that kind of formation you can see that kind of formation and exactly the same kind of cracks.

Q. Are they or not the ordinary fractures that you find in that rock?

A. They are.

Q. What are the sides of the different fractures composed of? What sort of rock?

A. All porphyry.

Q. Is there a vein in that shaft anywhere?

A. No sir.

Q. Is there any working connected with the shaft?

A. There is a drift in the bottom.

Q. Running in what direction?

A. To the southeast, I think.

Q. What does that disclose, if anything, as to a vein or vein formation?

A. The same material.

Q. Do you see any cracks or seams exposed in the rock through which that shaft is sunk other than those that are more or less upright?

A. There were some horizontal cracks, same as the vertical.

Q. Are they as notici-ble and as easily seen as the others?

A. Yes; they are somewhat plainer than the vertical.

Q. Somewhat plainer?

A. Yes sir.

Q. You mean by that they are larger?

A. Yes sir.

Q. Do they contain any mineral, any material between the

328 upper and lower walls?

A. They contain a filling of what we call manganese; they are manganese slips; it is iron that predominates in that formation and this iron is carried into those slips in solution and fills those slips sometimes two or three inches wide; and at other times they are close together.

Q. From the surface?

A. From the surface, yes.

Q. Did you take or assist in taking any lines of samples for assay from that shaft?

A. I did, yes sir.

Q. How many lines were taken from it?

A. I think two or three, I don't know.

Q. About when was the first taken?

A. The first one was taken on these perpendicular seams, I believe, as near as they could and I think four or five samples were taken right there together.

Q. Were any specific places selected; that is, were they taken at arbitrary distances?

A. Not on the first day, no sir.

Q. How were they taken on the first day? How was the rock actually broken and by whom?

A. By the different parties there.

Q. In the same way that the others were selected?

A. In the same way as the others in the Ophir shaft.

Q. The same sort of sample bags were used or sacks?

A. Yes sir.

Q. Was anything whatever placed in any of them except the rock or material taken from the shaft?

A. No sir.

Q. To whom was the first line of samples given?

A. To Mr. Doyle.

Q. When were the others taken?

A. About the middle or a little after in the same month, and one, I think, in the latter part of the month.

Q. By whom were they taken?

A. The same parties; however, Mr. Burdette, I think, was with us then.

329 Q. Were they taken at arbitrary distances or otherwise?

A. They were taken according to Mr. Moore's instructions at arbitrary distances.

Q. Do you remember the distance between the different samples?

A. I do not exactly.

Q. But you do know that they were taken that way?

A. Yes sir.

Q. From what parts of the shaft were they selected?

A. From these horizontal slips and perpendicular slips, both.

Q. Were they taken from the slips or from the walls of the slips or from both?

A. Both.

Q. Do you remember how many were taken?

A. I don't remember, no.

Q. Were they selected in the same way, so far as breaking the rock is concerned?

A. So far as I remember, yes.

Q. What sort of bags were they put in?

A. In canvas sacks, sample sacks.

Q. To whom were those sacks given?

A. To the assayers.
Q. Was there anything whatever placed in those bags except the material which you broke from the sides of the shaft?
A. I think not, no sir.
Q. Was any rock taken from the cross-cut or the drift running east?
A. Yes sir, that was sampled.
Q. The same way?
A. Yes sir.
Q. Were the samples given to the same persons?
A. Yes sir.
Q. How carefully did you examine that shaft and that drift for the purpose of determining what it showed and what it contained?
A. I was there three times.
Q. What length of time did you spend there in all in that shaft?
A. From an hour to two hours each time.
330 Q. Have you been there since?
A. Yes sir, I was there the other day.
Q. Is there any change in the shaft in any way?
A. I think there had been a blast put in on the upper side of the shaft.
Q. That would be the north side?
A. Yes, down about 18 or 20 feet.
Q. Was that nearer to the west or the east wall of the shaft?
A. It was in the northeast corner, I believe.
Q. What different appearance, if any, was presented after the blasting out of that portion of the rock, as compared to what it was before?
A. No difference that I could see.
Q. The same conditions were observable?
A. The same rock, exactly.
Q. What is the greatest length of that shaft? East and west or north and south?
A. North and south.
Q. The greatest length?
A. Yes, sir.
Q. Are you sure of that; I will ask you what is the size of the shaft, if you remember?
A. I have never measured the size.
Q. About?
A. I should judge about three feet and a half by seven.
Q. Is the longest part of it north and south or is the shortest part of it north and south?
A. I think it is a little southeast and northwest.
Q. In its general trend?
A. Yes sir; I didn't put a compass on it myself.
Q. What do you understand by a vein or lode?
A. A vein is a body of mineralized matter enclosed within the mass of the mountain.
Q. Must it be continuous?
A. It must have continuity, yes.

Q. Do you know where the shafts are that the plaintiff
331 calls number 2 and number 3?
A. I do.
Q. Have you ever examined either of them?
A. I have examined, I believe, number 3; it is between the Ophir shaft and the Whale shaft on the same line.
Q. Between the Ophir and Minnehaha?
A. Yes sir, I examined that; I was down in the bottom of that.
Q. When?
A. Last May.
Q. Was there a drift running there?
A. There is a drift running in a northerly direction.
Q. Towards the Ophir shaft?
A. Yes sir.
Q. What does it run on?
A. On the vein.
Q. What vein?
A. The vein disclosed in that shaft.
Q. In the Ophir shaft or the other shaft?
A. In the number 3 shaft.
Q. About what is the length of the drift?
A. It is between 30 and 40 feet.
Q. What is the condition of the other shaft called number 2, that lies to the east of the Ophir shaft?
A. It is in a very poor condition; it is caved in to within fifteen feet of the surface.
Q. Was that its condition in May of 1897?
A. Yes sir.
Q. Is there any difference between the present collar of the Ophir shaft and what it was at some time in the past; is the present collar higher or lower than it originally was by reason of placing some timbers there?
A. The men we brought to work there to clean out the shaft, I had them put on a set of timbers on top of it, yes.
Q. That set of timbers would raise the collar of the shaft how much?
A. About a foot or 13 or 14 inches.
332 Q. And that was put there in May or June 1895?
A. Yes sir.

Cross-examined by General JOHNSON:

Q. You say that shaft after it was cleaned out and these timbers had been put on measured twenty-eight feet?
A. From the old collar, yes sir.
Q. Didn't you measure that set of timbers to make it 28 feet?
A. The new set?
Q. Yes sir?
A. No.
Q. When was that set put on?
A. It was put on there before it was cleaned out.

Q. Then you hired these men by the day to clean it out?
A. Yes sir.
Q. Did you have a windlass to use?
A. Yes sir, we put up a windlass.
Q. You paid them for three days' work?
A. Yes sir.
Q. Two men?
A. I think it was three days.
Q. And after this three days you measured the shaft?
A. After they had the shaft cleaned out I measured the shaft to give them the contract.
Q. There was no more work done there until they commenced working under the contract?
A. No.
Q. And they worked there three days, these two men?
A. Yes sir, I think they worked a part of two days cleaning out the shaft and part of a day and another, I think, if I am right, they were putting on the set of timbers there and cleaning up around the top of the shaft.
Q. Then they worked there four days before you let the contract?
333 A. No, they worked there a day and a part of a day, I think, putting on the collar and cleaning up around the shaft; and then they cleaned out the shaft after that; I think it was three days in all—two and a half or three days, three days probably.
Q. You didn't do any measuring there at all until it was ready to let the contract?
A. There would not be any use in doing it.
Q. How then, when you did measure it, did you come to measure from the old collar rather than the new collar as it stood?
A. I drove a nail in the old collar that would not get knocked out in under the new set that I put in there; I would hang the tapeline on that and go down and measure; that nail I gave the contractors to understand it was to stay there until the contract was finished.
Q. Why did you put that nail down at the old collar rather than the new collar?
A. Because it was not so liable to get knocked out or destroyed.
Q. Did any one help you to measure that?
A. No sir.
Q. Do you say there was not some blasting done there?
A. There was none there up to that time, until after the contract was made.
Q. Before you measured it?
A. No sir; there might have been blasting before that that I did not know of.
Q. Before you measured it?
A. There was no blasting there between the time they started to clean out the shaft and the time I let the contract.
Q. How do you know?
A. I know it.
Q. Were you there all of the time?

A. Pretty much all of the time, yes sir.

Q. Did you stay there to superintend these two men when they were cleaning out the shaft all of the time?

334 A. Yes sir, I stayed around there.

Q. What else were you doing at that time?

A. I was working the Chief.

Q. What else?

A. Nothing else.

Q. You were sort of general foreman for these defendants at that time, were you not?

A. I was superintending these properties.

Q. All of the properties?

A. Yes sir.

Q. And you dropped everything else to stay there and watch these men those three days?

A. I didn't stay there all of the time to watch them; they were two or three days alone.

Q. How much of the time did you stay there?

A. I know if they had done any blasting they would have told me about it if it was necessary to do any blasting.

Q. They would have told you?

A. I think so.

Q. What were they doing all those three days, cleaning out that shaft with a windlass?

A. Picking out the snow and ice and debris.

Q. This was in June?

A. Yes sir.

Q. How much snow was there in there?

A. I don't know; I didn't measure it.

Q. Did they have blasting materials there?

A. No sir.

Q. Would it take two men three days to put up that one set of timbers around there and clean the snow out of the shaft in June?

A. It seems so, yes sir.

Q. Would it naturally seem so to a man that was hiring and paying men to work?

A. It took them about that length of time.

Q. Doesn't your contract with those men require them to clean out the shaft at their own expense?

A. I don't remember; we paid them.

335 Q. You paid them for three days' work before you let the contract didn't you?

A. For two or three days' work.

Q. Was that for cleaning out or was it for sinking two or three feet?

A. That was cleaning out and everything—cleaning out the shaft.

Q. I will call your attention to that contract: "Agreement made this 6th day of June, 1895, between Peter Johnson and F. S. Mears of Anaconda, Colorado, of the first part and the Doctor mine of the second part, witnesseth that the parties of the first part hereby and in consideration of the sum of one dollar to them in hand paid

which is hereby acknowledged, agree to sink the shaft under the evergreen tree on the Ophir claim, a further distance of forty-two feet, the same size that the same shaft is at present and to timber it where needed and to take out all snow and ice now in said shaft at their own cost, all to be done in good mining fashion, etc." And you afterward provide for $7.00 a foot, do you not?

A. Yes sir.

Q. Now do you say that you were wasting your time watching them clean out this shaft when they were to do it at their own expense?

A. Didn't I have a right to do so?

Q. I am asking for the fact, not the question of right?

A. That is a fact.

Q. Did you have a right as superintendent of this system of mines for Messrs. Cone and Robison, to leave their work and hover around a couple of men when they were doing something that they had to do at their own time and expense?

A. I certainly had; it was for their interest I done so.

Q. You paid them for three days' work before this contract was let?

336 A. I didn't draw that contract nor did I pay them a cent myself; I understood that they were to be paid; I understood that.

Q. Didn't you say these men were paid for three days' work?

A. I suppose they were.

Q. Before the contract was let?

A. I suppose they were paid for it, yes.

Q. Don't you say that was the agreement with them?

A. I agreed with them that they should clean that shaft out by the day's work; but it may be that Mr. Cone agreed different when he drew the contract; it is so long ago I might have forgotten just exactly what Mr. Cone did do about it.

Q. Don't you know that these men were paid for work there before that contract was let?

A. I am not positive, no.

Q. Don't you know that it was for sinking, rather than cleaning it out?

A. For sinking the shaft?

Q. That is, that they did some work there in making that shaft deeper after cleaning it out, and were paid for it?

A. They had a contract to sink the shaft forty-two feet.

Q. They had a contract after it was made, but you didn't let this contract until after the shaft was cleaned out, did you?

A. The ice and snow was cleaned out of the shaft before the contract was let, and the minute it was cleaned out, or as soon as they notified me, I went there and measured the shaft.

Q. After it was cleaned out and after this work that was paid for was done there, then you measured it and found it 28 feet deep and let the contract?

A. Which work do you allude to?

Q. Whatever work these two men did there?

A. Yes; they cleaned out the shaft; they cleaned the snow and ice out of it.

337 Q. They were paid for that were they?

A. I understood they were to be paid for it; I don't suppose men work for nothing.

Q. This contract was drawn up before it was cleaned out, wasn't it?

A. No sir.

Q. Doesn't it say that they are to clean it out at their own expense?

A. I don't think it was.

Q. Would you stipulate in that contract for cleaning it out if it had been already cleaned out?

A. It seems not; I don't know myself just when the contract was drawn up.

Q. This was the 6th day of June, 1895?

A. Yes sir.

Q. This contract was signed; do you say they cleaned the shaft out before that?

A. I say I don't recollect just exactly when it was, whether it was the latter part of May or the first of June, in about that time.

Q. Wasn't this contract given those men before they went there at all?

A. It may have been.

Q. And don't it stipulate for their cleaning it out at their own expense?

A. I don't know what it stipulated in that respect.

Q. And then didn't they go on and do some sinking there before you made the measurement to commence on their contract?

A. No.

Q. Do you know what day of the month you measured this and started them in on the contract?

A. Some time the first of June.

Q. Those were competent miners, were they not?

A. Yes sir.

Q. When did you say you first became acquainted with this Ophir shaft?

A. It was some time in October, 1893.

Q. Do you know whether that was before the examination that was made with a view of a hearing at Pueblo in the land office?

338 A. I think it was before.

Q. What examination of the shaft did you make then?

A. On the first time?

Q. Yes?

A. Just a casual examination.

Q. What did you find there at that time?

A. I found a great deal of ice and snow in the bottom of the shaft.

Q. Did you find any vein there?

A. No, I didn't notice any vein there at that time.

Q. You were not looking for a vein there at that time, particularly; you just made a casual examination?

A. That was all.

Q. You never made anything like a careful examination until 1895?

A. I forget now whether I was there after that or not; I think I was there at other times but not for any special investigation.

Q. Do you think you were there between the time you examined this property in October, 1893, and the time you examined it in June, 1895?

A. Yes sir, I must have been on the ground several times between that.

Q. Was there any work done in that shaft between those two periods?

A. No sir, I think not. I am satisfied that there was not.

Q. Were you ever in the shaft between those two periods?

A. I don't recollect now.

Q. For what purpose did you examine that shaft in October, 1893?

A. I was looking over several of the claims that belonged to Mr. Cone and Robison and went into a great many shafts that day, five or six different shafts.

Q. Did you make an affidavit to be used in this court on the hearing of an application for an injunction in this case?

339 A. I don't remember; possibly I did.

Q. Did you state in an affidavit made at that time as follows: "He first became acquainted and conversant with the said property about the month of October, A. D. 1893, but at that time the discovery shaft upon the Ophir lode had been sunk to a depth of not less than forty feet"?

A. Yes sir.

Q. "Though affiant cannot actually state as he made no actual measurement of it upon that occasion?"

A. That is right.

Q. How did you come to make that statement?

A. It ran in my mind that it was that deep; among the different shafts I examined that day I had concluded that was the depth of it.

Q. If you didn't know anything about it how did you come to say that it was not less than forty feet that you put as the very lowest?

A. I knew that there was a shaft there and I was judging of the distance down that it might be that deep together with the snow and ice that was in there at that time.

Q. "Affiant says that at the point where the Ophir discovery shaft was sunk, the wash on the surface of the mountain was about 8 feet in depth, at which depth the solid formation is found?"

A. Yes sir.

Q. "That at that point in the Ophir discovery shaft there was shown in the shaft a well-defined gold-bearing vein which was quite

narrow at the point where it outcropped, but rapidly increased in width as depth was gained?" Did you swear to that?

A. I expect I did, yes.

Q. Did you find any such thing there in October 1893?

A. On my first visit to the shaft the timbers were quite open through down about 18 feet; there were signs of mineral in
340 there and I got rock out of there, picked it out; since then the place has been filled up; I tried to get in there in order to show the witnesses the same thing at this last examination, but there was stull put in there so that I couldn't get in.

Q. The shaft in October 1893 was timbered down?

A. Yes sir.

Q. 16 feet, was it not?

A. Yes sir.

Q. And has been ever since?

A. Yes sir.

Q. Has there been any change in those timbers?

A. Nothing more than to nail some plank on the sides of them to keep the rock from falling out between the timbers.

Q. When you made this affidavit that this well-discovered vein — rather narrow at the top, and rapidly increasing appeared at 8 feet from the surface, you didn't remember that the shaft was timbered, did you?

A. As I told you before, I got in behind the timbers.

Q. You found, then, a vein in behind the timbers?

A. Just behind the timbers, yes sir.

Q. At a point 8 feet from the surface?

A. 8 or 9; I don't know the exact distance.

Q. That was a well-defined gold-bearing vein, quite narrow where it outcropped, but rapidly increasing in width as depth was gained; did you get in behind the timbers and follow this vein down?

A. No sir.

Q. Did you see that vein by any faculty of second sight?

A. No sir.

Q. How did you see that vein then, rapidly increasing in width as depth was gained from a point eight feet from the surface?

A. How did I see it?

341 Q. Yes?

A. I got in behind the timbers there.

Q. In how many places?

A. Just one place.

Q. And from that one place you could see it narrow at the top and rapidly increasing in width as depth was gained?

A. From what was in sight after the shaft was cleaned out down there it showed me then that it was increasing in width as it went down.

Q. I thought you said a minute ago that you never examined that vein until 1895?

A. That was the time I examined that; what time was that affidavit made?

Q. I understand this affidavit is pointing out what you discovered there in 1893: "That the appearance of the shaft at that time indicated that no work had been done therein for a considerable period of time"?

A. Yes sir.

Q. "Affiant says that his purpose in visiting the shaft was to arrange for the doing of further work therein in his capacity as superintendent for the plaintiff?"

A. Yes sir.

Q. You went there in search of a point to go to work with the view of making your employers some money, didn't you? And on that same day you visited several other prospects for the same purpose?

A. I did, yes sir.

Q. And you found there on that occasion this vein as you have described it here?

A. Yes sir, I found the blossom rock of a vein there behind the timbers.

Q. Narrow at the top and rapidly increasing in width; but you didn't do any work on it until 1895?

A. No sir.

Q. You didn't find anything there, as a matter of fact, to go to work upon, did you?

A. I went to work on the Chief property.

Q. If you found this vein as you have described it here and
342 say why didn't you go to work on it?

A. I don't know; I was not authorized to.

Q. Weren't you authorized to look over the various properties and give advice as to where you should go to work?

A. I was not instructed to go to work upon it.

Q. Wasn't you, as superintendent of these defendants sent out to look for a prospect and the best prospect you could find to go and work?

A. Yes sir.

Q. And you found this, that you afterwards gave this glowing description of, and didn't touch a pick on it for about two years?

A. Yes sir.

Q. Did you find any such thing there in October?

A. I did.

Q. In 1893?

A. I did.

Q. Didn't you say a minute ago that you didn't find anything that you didn't examine it; didn't you say so since you have been in that chair?

A. In 1893 I didn't see anything in the bottom of the shaft; in 1895 I did.

Q. There is not a thing here about 1895; it is all about 1893?

A. That affidavit was made in 1897 after the 1895 work was done.

Q. This affidavit continues: "That he made a careful examina-

tion, broke down certain specimens from the vein and had the same sampled and assayed;" did you do any such thing in 1893?

A. At that time?

Q. Yes, or at any time in 1893?

A. I took some samples there in 1893, yes; I think I did.

Q. I thought you said a minute ago that you didn't examine that shaft in 1893?

A. I don't have to necessarily examine a thing to take rock and have it assayed.

343 Q. "That is showed the vein to be of good value; the ore containing gold in marketable quantities; that in pursuance of this examination the shaft was sunk to the depth of 70 feet." Is that true?

A. Yes sir.

Q. In pursuance of this examination in October 1893?

A. It was sunk some time in June 1895.

Q. Do you call that in pursuance of that examination in October 1893.

A. I don't know what you would call it but it was after 1893.

Q. It was nearly two years afterwards; would you call that doing a thing in pursuance of that examination?

A. Not exactly,

Q. Weren't you when you made that affidavit intending to create the impression that this work done in 1895 was done back in 1893?

A. No sir.

Q. Why did you say then that you did work which actually was done in 1895 in pursuance of this examination of 1893?

A. I don't know; it was done after that time.

Q. "That in pursuance of this examination the shaft was sunk to the depth of 70 feet which is its present depth, and since that time levels have been driven from the bottom along the vein north" etc. You testified as a witness in this case on a former trial in May, did you not?

A. Yes sir.

Q. When you made that affidavit you said nothing about the timbering of the shaft, did you?

A. Timbering the Ophir shaft?

Q. Yes?

A. I don't know whether I did or not.

Q. In May for the first time you explained how you could reach your arm in and pick off blossom rock between the timbers?

A. Yes sir.

344 Q. That was the first thing you did by way of an examination of the shaft?

A. That was that much of an examination at that time.

Q. In describing how you examined the shaft when you were on the witness stand in May you commenced by describing that you started down and stopped 8 feet from the surface and reached your arm in between the timbers?

A. Yes sir.

Q. And picked off a piece of blossom rock; that is before you had been down?

A. Yes sir.

Q. Did that actually occur?

A. It did.

Q. Wasn't that put in by way of explanation of your affidavit as to finding a vein there 8 feet from the surface, which as a matter of fact was hidden by the timbers?

A. It could not be hidden if I got in there and got the rock.

Q. Is that the way you usually proceed to examine a shaft, by attempting to reach your arm in between the timbers and prospect around?

A. Not very often.

Q. Before you go down in the bottom of the shaft?

A. There are a great many ways of prospecting and examining veins; a great many curious ways that perhaps you are not on to.

Q. I have no doubt there are but this is a little beyond anything I ever heard of. Did you ever examine any other shaft that way?

A. I think I have.

Q. How many?

A. I don't know how many; there is one there they call the 76-foot shaft on the Doctor mine that I reached in, and they sunk down alongside the vein and got big assays there.

Q. You generally reach in between the timbers before you go down into the shaft and look at the walls?

A. I do examine the shaft in that way as I go down, if I
345 cannot any other way; if the timbers are open enough.

Q. As a matter of fact, do these timbers at the distance down of 8 feet from the surface occupy the same position now as they did then?

A. They do, yes.

Q. And are they not close together so that a man cannot get his arm in there?

A. No sir.

Q. Were they boarded up at that time?

A. You can go down yourself and get both arms in there at the same time in that particular place.

Q. Were they not boarded up?

A. Yes sir, boards were put on there in 1895.

Q. The timbers have not been changed at that depth at all since?

A. No sir, no more than as I say there is a stull in there where I got this rock in 1893.

Q. What do you mean by that?

A. It is a timber five or six or seven feet long put in there in that big crack kind of chinked up.

Q. Wasn't that in there before that?

A. No sir.

Q. When was that put in there?

A. I think it must have been put in there by Mears and Johnson to keep the rock from falling through there when they nailed the plank on.

Q. You knew, did you not, at that time, in October 1893, that Mr. Cone was claiming that if he had anything at all that was any semblance of a discovery it was over in the opposite corner of the shaft?

A. I don't know anything about what he claimed.

Q. Didn't he tell you that?

A. No sir, not that I recollect now.

Q. Didn't he tell you his theory about that shaft?

A. No sir.

Q. Didn't he tell you what he had testified to before the
346 land office?

A. I didn't know that he had testified at that time.

Q. Didn't he at all consult with you as to the appearance of that shaft?

A. No sir, not that I can recollect; he might have done so; he consulted with me often.

Q. At what point in that shaft did you reach your arm through?

A. Between 8 and 10 feet; I didn't have any tapeline to measure it; it is about that distance.

Q. From the surface?

A. Yes sir.

Q. In what part of the shaft—which side?

A. In the southeast corner, I believe.

Q. That is the corner now where you find the vein, isn't it?

A. The corner where the vein shows up, yes.

Q. You hadn't been down below yet to see it down there?

A. No sir.

Q. You just happened then to reach your hand through the timbers at the exact point where that vein that you discovered in 1895 34 feet down would come up and where you are now trying to bring it up, didn't you?

Defendants object; objection overruled.

Q. You just happened then to reach your arm through the shaft at the point in this southeast corner where the vein afterwards discovered would naturally come nearest?

Objected to; objection overruled.

A. I didn't know that there was any vein to be discovered down there other than I was looking for a vein; I was looking for anything that might appear anywhere.

Q. Did you reach your arm through the timbers at any other point in the shaft at that time?

A. I did.

347 Q. What other point?

A. All around, I believe; all around the shaft.

Q. How many veins did you find?

A. I didn't find but the one place there that showed me vein matter—blossom matter.

Q. Then there were holes between the timbers all around large enough to put your arm through?

A. On that particular set of timbers the space was five or six inches all around the shaft.

Q. And you prospected around that shaft?

A. Yes sir.

Q. Before you went down below to see what was below the timbers?

A. Yes sir.

Q. As a matter of fact don't miners and wasn't it so in that shaft when they put in those timbers, fill in with boulders and debris around so as to make it solid behind the timbers?

A. Sometimes.

Q. Wasn't it so there?

A. No, sir, it is not so there today.

Q. Did you inspect this sinking from time to time after these men commenced on the contract?

A. I did.

Q. When?

A. I measured it every ten feet.

Q. You superintended rather, did you not, the taking of these samples for the purpose of making assays, both from the Ophir shaft and the Tecumseh discovery shaft for the purpose of the last trial?

A. No sir.

Q. Who did superintend it?

A. I think Mr. Moore; I would not be positive; I had nothing more to do with it than the times they might want to take a sample right where I stood and I would just pick a sample out of there.

Q. You were superintendent of the property at that time?

A. Yes sir.

348 Q. Didn't you testify at the last trial that you did all of the picking, substantially, in taking these samples?

A. I might have done so on the first day.

Q. Didn't you say that you did so each day that you worked there?

A. I don't remember; I helped each day, though.

Q. You took samples from the vein below the 34-foot point, where it is conceded there was a vein of pay ore, rich mineral, etc., right along at the same time you took these samples above that point?

A. Which vein do you mean?

Q. Speaking of the Ophir vein, of course.

A. We took samples from a point about 20 feet from the collar of the shaft down to the bottom.

Q. Clear down to the bottom of the shaft?

A. Yes sir, not exactly to the bottom, within four or five feet.

Q. This was quite an assembly of people there when those samples were taken?

A. There were five or six of us there.

Q. How many people were there on the first occasion?

A. Possibly five.

Q. Who were they?

A. There was James F. Smith, Mr. Boehmer, myself and Doyle, I think; there might have been more.

Q. Who were there on the second occasion.

A. The same parties and I think McAllister and Mitchell were there.

Q. And Burdett?

A. Yes sir, Burdett was there.

Q. Was he there on both occasions?

A. He was there several times, I forget whether he was there the first time or not; I ain't positive.

Q. Mr. Moore and Mr. Max Boehmer were there in the capacity of employed experts were they not to examine the property for you?

349 A. They were there as witnesses to familiarize themselves with the property.

Q. Burdett and Doyle were there as assayers were they not?

A. As well as witnesses, yes.

Q. And all of those other people were more or less there for the purpose of being witnesses?

A. Yes sir.

Q. And you were taking samples in order to produce them in evidence?

A. We were taking samples to show the continuity of the vein throughout these workings.

Q. You were taking samples for the purpose of showing a discovery in the Ophir shaft and that there was no discovery in the Tecumseh shaft, weren't you? That was your objective point?

A. That is the fact, I guess.

Q. That was what you were trying to show, wasn't it?

A. That is the way it appears.

Q. Now, as a matter of fact, did any one man take down a sa-ple from the walls of that shaft, keep it in his possession and assay it?

A. Which shaft?

Q. Either.

A. There was no sample taken out of either of those shafts as I know of, that was in anybody's possession outside of the assayers'.

Q. After they were finally put in bags?

A. Yes sir, they had their sacks with shoulder-straps, large sacks that they put them into just as soon as they were filled.

Q. Wasn't all this crowd of people who were there on both of these occasions more or less getting ore and putting — in those sacks?

A. No sir.

Q. What were they doing?

A. They were looking on, examining the shaft.

350 Q. How many of them handled rock that went into those bags?

A. I think two, possibly three.

Q. Who were they?

A. Mr. Doyle, Burdett, myself and sometimes Moore.

Q. Did Moore pick off any rock and put it into a sack?

A. I think he did upon some occasions perhaps.

Q. Do you know from what point?

A. No, I couldn't say.
Q. Was it down lower in the vein or was it above in the neighborhood of 25 feet?
A. I think it was down in the south drift.
Q. Did he pick off any samples or ore and keep it and give it to the assayer to be assayed?
A. Mr. Moore?
Q. Yes?
A. He might have taken an individual sample, but not that I know of.
Q. Was there a single sack or sample of that ore that you didn't have access to?
A. I think so, yes sir.
Q. Which ones were they?
A. There were samples taken there while I was down in the bottom of the drift, or up above, in the shaft.
Q. There were samples taken there while you were in the bottom?
A. Yes sir.
Q. How do you know there was?
A. I understood so.
Q. You simply heard it?
A. Yes sir, and they were sampling when I was down there.
Q. Did you testify at the last term of court as follows:
"Q. Who broke the samples? A. I did. Q. What was done with them after they were broken, the first line of samples? A. I would give Doyle the first sample and he would put it in his sack and Burbett the next out of the same place, apparently, as near as I could take them out of the same place. Q. Do you remember how many were taken? A. Ten or twelve; I couldn't say exactly. Q. What was done with them? A. The assayers took charge of
351 them. Q. What assayers? A. Mr. Doyle and Mr. Burdett?
Q. Did those assayers take charge of them at the time you broke them? A. Yes sir, at the time I broke them they had charge of them all of the time. Q. Did you assist in taking any samples in the other shaft—the Ophir shaft? A. Yes sir. Q. When was that? A. I assisted in taking two samples for Mr. Doyle, I think on the 4th day of May, 1897, and another I think, on about the 11th or 12th of the same month and the same year. Q. How many lines of samples did you take? A. Three lines, I think. Q. Did you take them in the same way? A. I took them in the same fashion as I did those of the Tecumseh; the two samples taken the first day, parallel samples, we took one all around the shaft, I believe, and one at about the 22-foot point below the surface in that shaft in one particular place. Q. I mean you took them in the same way; I mean did you break them down and did the assayers take them in the same fashion? A. Yes sir. Q. Did you see them afterwards? A. No sir. Q. You handled the pick, did you? A. Yes sir, I did. Q. Who were present at the time you took this last line of samples in the Ophir discovery shaft? A. Mr. Boehmer, Mr. Moore, myself and Mr. Burdett and Mr. Doyle. Q. The other line that you took from there? A.

You mean the very last samples we took? Q. That is
352 the one I meant in my last question; and I now ask about the other line that you took; you took two, didn't you, two lines of them? A. Yes sir. Q. Who were present when the first line was taken? A. The same parties."

A. That is correct.

"Q. As I understand, in the taking of these samples you picked them down and gave them to the assayers yourself? A. Yes sir. Q. They didn't pick anything off of the walls? A. Not at all times. Q. Did they at all? A. Yes sir, they did sometimes; but the first line of samples taken by Burdett he took those himself. Q. Did he take any samples in the Ophir claim? A. No, I picked all of the samples. Q. They simply just stood there as you gave them? A. They simply just stood there as I picked down, yes sir." Is that correct?

A. That is correct, I guess.

Q. Did you, in your former testimony, in giving an account of taking these samples give an account of any one using the pick except yourself in the Ophir shaft?

A. I think there were others using the pick; I would not be sure.

Q. You say there was nothing of the nature of a vein in the Tecumseh shaft?

A. No sir, not that I would recognize or could recognize.

Q. You say there are cooling cracks there?

A. Yes sir.

Q. What is a cooling crack?

A. Fractures in the joint planes in the country rock.

Q. What is a cooling crack?

A. It is a fracture in the rock.

Q. What is the difference between a cooling crack and a fissure?

A. There is quite a bit of difference; one may be filled with something while the other is not; still, a cooling crack has a
353 chance to be filled, too, from the surface material if it was close enough to the surface; if it has been removed a little to let the surface filling fall into the crack.

Q. Isn't it supposed that these fissure veins, even that reach to the lowest depths that fissure veins have ever been filled, were created by the cooling of the crust of the earth?

A. I guess so, yes.

Q. On the theory that the whole earth on its surface, at least, was once a molten mass and in the process of cooling these fissures were created; is that what you call a cooling crack?

A. I would not call those cracks in the Tecumseh shaft a fissure; I could not; they show no signs of any vein material at all.

Q. A fissure may be entirely barren, may it not?

A. It is true enough; there is cracks there extending for a distance horizontally and perpendicularly.

Q. Are there not cracks there that are perfectly consistent and regular as far as they can be traced and that can be traced for a distance of thirty feet down?

A. There is one there that is very regular while the others are not.

Q. Are not the others equally regular and parallel to that one?

A. They may be parallel, yes; there are a great many slips running there in all directions.

Q. Are they not perfectly regular so far as they can be traced?

A. So far as they can be traced, yes; but they can't be traced the distance of the depth of the shaft.

Q. Can't they be traced until they disappear into the walls of the shaft?

A. Yes sir.

Q. You saw no place where any one of those fissures stops,
354 did you, so far as development has gone?

A. No.

Q. Did you take samples from those fissures where you thought they would be most likely to carry gold?

A. I seen no fissures there to take samples from; I took samples from those cracks in there.

Q. Didn't you take your samples from a distance from those cracks?

A. The samples were taken from the edges of the cracks from both sides up and down the cracks.

Q. You say you can see this kind of cracks in the railroad cuts?

A. You can.

Q. May not a railroad cut disclose a vein just as well as any other kind of an excavation?

A. When they do you can tell it; there is no difficulty in telling your vein when you can see it.

Q. You say you can find just such cracks as these?

A. Similar.

Q. If those cracks are discolored so that there is a vein filling there that can be plainly seen with the naked eye, and that will assay in appreciable values, do you say that just that kind of cracks can be found along the lines of railroads?

A. They can, yes sir.

Q. Will you contract to point out a few of them?

A. I can point out a great many in that district that will assay, too.

Q. Of course the porphyry is broken up and cracked in every direction wherever it is exposed?

A. Yes sir, just exactly the same as the Tecumseh shaft.

Q. Do you find cracks that continue regularly?

A. You do.

Q. For a space of thirty feet?

A. I have seen them for twenty feet; that is about the
355 deepest cut that I have seen; I have seen cracks to that depth and they might go on for fifty feet further if they were exposed.

Q. Those cracks if filled with mineral would be veins wouldn't they?

A. No sir.

Q. They would not?

A. No sir, for this reason: There is more or less gold in the surface material in that camp, that will assay more or less gold in the way of placers, and the surface or the moisture and the waters that pass through this loose rock, that is, wash, is carried into these seams, filled up with manganese of iron and discoloring it into a red oxide of iron, and it carries the gold in with it for considerable distance.

Q. Where does it get the gold?

A. Out of the wash, and the gold gets into the wash by way of impregnation from float rock or quartz carrying gold.

Q. How do you know but what all the veins in Cripple Creek are filled from the surface?

A. I know different.

Q. How do you know how they were filled?

A. I followed them to where I know that it could not be filled by surface material.

Q. Where does the material come from that fills them?

A. Those cracks are never very rich; they run all the way from a trace up to a dollar or a dollar and a half, possibly two dollars.

Q. If you know that these veins—the mineral—has not lodged in these veins by water percolating through these crevices, you must know where the gold did come from; now can't you tell us?

A. This gold, I suppose, infiltrated into these cracks, comes from disintegrated quartz.

Q. I am speaking of the gold that fills the fissures generally on that hill in Cripple Creek?

A. That is beyond my knowledge.

356 Q. Don't you know that scientific men, a great many of them, advance the theory that all of these fissures have been filled by water percolating through these fissures from the surface?

A. There is a great many theories, but I would not venture to say which is right; there is one thing that I know is correct, and that is the filling of these cracks, that is nature; it is something that you can't get around in that gold-bearing district.

Q. Then you would not pronounce a fissure or a crack in the rock-bearing mineral a vein until you had satisfied yourself that the mineral did not get there from the surface?

A. I didn't say anything of the kind.

Q. Is that your theory?

A. I don't theorize on it at all, on that part of it.

Redirect examination:

Q. Mr. Dahl, you are certain, are you not, that before the work of sinking this shaft begun in 1895 there were two or three days spent in cleaning it out and fixing up the cribbing and the windlass?

A. Something like that time, yes.

Q. Was there any blasting or removal of the rock in place at the bottom of the shaft?

A. There was not.

Q. Until the 42-foot work began?

A. No sir.
Q. You are certain of that?
A. I am certain of that.
Q. In October when you went over this ground, you had just been employed by the defendants, had you not?
A. Yes sir.
Q. To take the place of a former foreman?
A. Yes sir.
Q. You examined a great many shafts, you say?
A. Yes sir.
Q. How many claims at that time were you required to look after?
357 A. I was required to look after all of their property there in the district.
Q. How many were those?
A. That I looked at that day?
Q. No; that the defendants put you in charge of; how many were there, one or a dozen?
A. There were six, I think.
Q. And on that day you say you had examined a good many or looked at a good many of those shafts?
A. Yes sir.
Q. On these different properties?
A. Yes sir.
Q. Who was the actual manager of the properties at that time, directing where the work should be done and how it should be done?
A. Mr. Cone.
Q. Is it not a fact that the work that was done upon the properties after October 1893 was done so far as the place where it was performed by direction of Mr. Cone and not by yourself?
A. Yes sir.
Q. At the time you made this affidavit to which your attention was called, state whether you aimed to give your best recollection of dates and distances.
A. That was it; I made that in a hurry.
Q. Were you not at that time under the impression that the work of 1895 was done by lessees, which actually was done, as you subsequently, from refreshing your recollection, found?
A. Yes sir, I was mixed up on that.
Q. Is there anything unusual in the examination of a shaft behind or between the timbers and placing your hand in for the purpose of getting rock?
A. Every prospector in the district would tell you that that is a usual thing.
Q. So that there is nothing unusual about it, is there?
358 A. No sir, not at all.
Q. You were asked who superintended the taking of those samples; was there any superintendent there, anybody directing what should be done or how it should be done, or were you up

there for the purpose of examining the mine with reference to this coming trial?

A. I don't know as there was any particular superintendent; I think Mr. Moore was kind of leading the thing—or Boehmer, I forget which it was; it might have been Mr. Smith.

Q. Were those samples being taken at the same time the mine was being examined?

A. Yes sir.

Q. When you were engaged in breaking the samples, did you also hold the sack, or did some one else hold the sack?

A. Some one else.

Q. Was it possible for one man, standing upon the timbers there, to break the rock and at the same time hold the bag?

A. No, he would have to hold on with one hand, generally.

Q. You were asked as to whether all of those samples did not pass through your hand; if you placed anything in those samples, or any of them at any time or caused it to be done, I want you to tell the jury?

A. I did not.

Q. Do you know of any method by which you could inject values into the Ophir samples and take it out of the Tecumseh samples?

A. No.

Q. Then those samples were taken for the purpose of showing a vein, as you say, in one shaft and not showing a vein in the other, was, or was not the purpose to get the samples assayed as they actually and truthfully were?

A. It was, as far as I know, yes.

359 Q. Did you at any time in taking any of those samples aim to do anything else, or did you do anything else?

A. I didn't do anything else.

Q. Did anybody do anything with those samples of ore or tamper with them, adding anything to them or taking anything from them in your presence?

A. No; I picked the rock and the sack was held by the assayers, and I knew nothing more about the samples at all.

Q. Did you squirt anything into the sides of the shaft or press anything out of the sides of the shaft before you took the samples?

A. No sir.

Q. As a matter of fact wasn't the rock broken as you found it?

A. Yes sir.

Q. And given to the assayers; and didn't they help take each of the samples there by holding the bag or being there?

A. That is right.

Q. There are a great many placers located in that camp?

A. Yes sir.

Q. What is a placer?

A. A placer is gold found in bed rock.

Q. In a loose condition?

A. In a loose condition, yes, sir.

Q. As distinguished from a lode deposit?

A. Yes sir.
Q. This contract to which your attention was called provides for sinking a shaft 42 feet?
A. Yes sir.
Q. Why was 42 feet selected as the distance to which it should be extended; why was the contract let for 42 feet, if you know, instead of any other depth?
A. I don't know.
Q. How deep did you aim to have it in all?
A. 70 feet.
Q. How deep was it?
A. It was 28 feet.

360 Q. Is it or not unusual when a vein comes near the surface to change its dip?
A. It is usual in that camp.

Q. Is it or not unusual for a vein immediately below the surface to come up to the surface in branches or stringers?
A. Yes sir.
Q. More than one apex?
A. Yes sir.
Q. Well, is it usual or unusual—is it common or uncommon?
A. It is common.
Q. It is a common thing?
A. Yes sir.
Q. Is it or not a common thing on that hill and on Bull hill or Bull mountain?
A. It is in the whole district.
Q. Or does it occasionally occur?
A. It occurs in the whole district.
Q. Is that true after you get down to solid formation?
A. After the vein gets into solid formation it takes its natural course.
Q. What do you mean by solid formation—picking ground?
A. Blasting ground.

361 W. E. SKIPWORTH, being first duly sworn on the part of the defendants, testified as follows:

Q. Where do you live?
A. Cripple Creek.
Q. How long have you been a resident of the Cripple Creek district?
A. About five years.
Q. What is your business?
A. Mining and ore sorting.
Q. How long have you been engaged in mining?
A. Close to twenty years.
Q. In what parts of the country have you mined?
A. In Colorado, Utah and New Mexico.
Q. In what parts of Colorado have you mined?
A. I don't know what county—Creede.

Q. Mineral county?
A. And Lake county, around Leadville, and Chaffee county a
El Paso.
Q. How long have you been a resident of Colorado?
A. Since 1879.
Q. Where are you engaged in mining at present?
A. On the Mary McKinnie, at Anaconda.
Q. Is that anywhere near the Tecumseh and Ophir locations?
A. No sir, it is half a mile from them.
Q. Have you worked in or examined any other mines in the Cr
ple Creek district than the one where you are now working?
A. Yes sir, I worked in quite a number, in the Elkton and A
choria-Leland, that is among the producers, and the Republic.
Q. In what capacity have you worked as a miner?
A. Miner and ore-sorter, both.
Q. Do you know where the Ophir and Tecumseh locations
situated?
A. Yes sir.
Q. How long have you known of that section of Ra
hill?
362 A. Ever since I was in the district; I used to work on
Elkton before it was a mine; I used to walk right over
ground backwards and forwards.
Q. About how far are those properties from the Elkton?
A. I should judge they are between a half and a quarter o
mile.
Q. On the same slope of the same hill?
A. Yes sir, the Elkton is lower down.
Q. Near the bottom of the gulch?
A. Yes sir.
Q. Have you ever made any personal examination or inspect
of the properties in controversy?
A. I done the assessment-work on one of them and looked at
other and inspected it a little.
Q. Which one did you do the assessment-work on?
A. On the Ophir.
Q. That was in 1897?
A. Yes sir, and part of it this year, it ended up.
Q. Do you mean in 1897 or 1898?
A. Partly in both.
Q. Beginning at what time?
A. Beginning last December and I think it ran over three d
in this month, or three days in January I finished it.
Q. Whereabouts was that work done?
A. In the bottom, in the south drift; I simply ran the south d
further ahead.
Q. About how many feet did you run it?
A. I should judge about seven or eight feet.
Q. Is it blasting rock?
A. Yes sir.
Q. Hard material?

A. Yes sir, it is tough and spongy.
Q. Did it involve the hoisting of the waste to the surface?
A. Yes sir; we didn't raise it; we hoisted what had been broke the year before.
Q. Did you hoist any to the surface?
A. Yes sir; we hoisted four days to start with.
Q. That consisted of material which you broke or that had
363 been broken?
A. That had been broken.
Q. That you wanted to get out of the way?
A. Yes sir.
Q. How recently, if at all, have you examined this property and the Tecumseh?
A. I should judge it was about ten days ago.
Q. What properties did you examine on those occasions?
A. I examined the Ophir shaft, the shaft that I had worked in, and the Tecumseh discovery shaft.
Q. Who was with you when you examined the Ophir shaft?
A. The surveyor, Mr. Darby.
Q. Thomas L. Darby?
A. And Mr. Dahl.
Q. About what length of time did you spend in the shaft?
A. I should judge we were there an hour or an hour and a quarter; probably not that long.
Q. Were you there more than once?
A. I was there for three weeks.
Q. You mean with Mr. Darby?
A. No.
Q. You were in the shaft up and down for three weeks?
A. Yes sir.
Q. Please state to the jury what sort of material that shaft is sunk in, and what, if anything, is disclosed of a vein formation?
A. Are you speaking of the Ophir shaft?
Q. Yes, of the Ophir shaft?
A. The shaft is sunk through porphyry, the common country rock up there, I should judge about seventy feet from the fact that I saw it measured something like that, and sunk down straight; and there is a vein pitching something like that that it goes through; the vein still shows in the drift in which I worked at the bottom of the shaft.
Q. How far towards the collar of the shaft do you say that vein can be seen distinctly?
364 A. I think I could see it—that is, where it is last visible.
Q. Yes; if it goes out of the shaft?
A. I could see the foot-wall up as far as twenty-three or twenty-four feet from the collar of the shaft.
Q. The foot-wall or hanging wall?
A. Hanging.
Q. How clearly can you see the vein through the shaft below the point where the foot-wall leaves it?

A. It is easily distinguishable; you can look up the shaft and see it clear cut all the way through.

Q. Is there any question in your mind about its being in the shaft or any part of the shaft up to the point which you last mentioned, so far as the hanging wall is concerned?

A. The hanging wall above that looked like it was probably it was shot out. It is broken; in sinking the shaft, probably, I think it has been shot out.

Q. Is it or not true that in the vein formation upon that hill the gold and metallic contents blend into the sides of the cracks or fissures?

A. Yes sir.

Q. And into the country?

A. It is pretty common on that hill, and also on Beacon hill.

Q. Isn't it a fact that the actual walls of the fissures thereby become ore of commercial value and is shipped as such?

A. That is a common occurrence on a good many mines, that they get into their wall and ship.

Q. That being so, how do miners determine where the country rock is and where the vein ends?

A. Sometimes it is very hard to determine.

Q. Is it or not necessary at times to resort to an assayer?

365 A. It certainly is.

Q. What is the characteristic or common vein filling of veins there?

A. Quartz and talc.

Q. Anything else?

A. In different mines the filling in the veins is different.

Q. Is porphyry at any place or time any part of the vein filling?

A. Yes; a part of the Elkton is porphyry.

Q. Is it or not a fact that the porphyry vein matter frequently resembles in color and texture the appearance of country rock?

A. Yes, sir, in sorting ore lots of times you have to put it away on one pile which you call a doubtful pile until you can get an assay on it.

Q. Before you know whether to throw it over the dump or ship it?

A. Yes sir; you don't know whether to throw it in the ore bin or throw it outside.

Q. Is it or not a fact that circumstance sometimes causes miners to get off their vein and to get into the country?

A. Yes sir, often.

Q. Is there any doubt in your mind about a vein being in that shaft from the point that you last named under the collar down to the bottom of it or down to the drift?

A. I can see that hanging wall at that point; I was very particular about it; I kept measuring it with a tapeline and kept looking up as far as I could distinguish it.

Q. How is the shaft arranged for examination, so far as stulls or ladders are concerned?

A. There is a ladder from the bottom to the top; you can go up

and examine it slowly, just climb the ladder and keep looking as you go up.

366 Q. Upon which side or end of the shaft is the ladder?

A. On the south side I should say; south of east.

Q. Did you or not examine the shaft that is called Tecumseh number one or discovery shaft?

A. Yes sir.

Q. When did you make an examination of that?

A. It was about ten days ago when I was last over there.

Q. Did you do that by yourself or was there somebody else with you?

A. There were two gentlemen with me.

Q. Who were they?

A. Mr. Darby and Mr. Dahl.

Q. How careful an examination did you make of that shaft?

A. I looked at it very thoroughly; that was what I was there for.

Q. Was the shaft so that you could go down into the bottom of it and examine it?

A. Yes sir.

Q. As fully and closely as you desired?

A. I think there was a little snow in the bottom of the shaft; we had to be a little careful in going down from one stull to another; but if a fellow is mining he is in the habit of that, though.

Q. Please tell the jury what that shaft disclosed to your mind, if anything?

A. The shaft has a general resemblance to a good many shafts sunk on that hill in the porphyry more or less broken up.

Q. Did you observe in the shaft any vein, lode or ledge, or any appearance of a vein, lode or ledge anywhere?

A. There is some iron seams or streaks going down in there; I would hardly call them veins.

Q. Is that or not characteristic of the country rock there?

A. Yes sir; I can go into a dozen shafts up there and see the same thing.

Q. Do you see any other cracks in that shaft except those which are vertical or more or less vertical?

367 A. Yes sir; I saw one probably half way down there that seems to be stronger, if anything, than the vertical cracks.

Q. Did you see more than one?

A. There probably might have been two or three, but one in particular that I noticed.

Q. From your experience as a miner, would you or not say that there was any vein in that shaft?

A. I would hate to stake my reputation on a vein being there.

Q. What is the cross-cut from the bottom of the shaft driven upon, if anything?

A. It is driven in the common country rock through that whitish, yellowish porphyry.

Q. Does that disclose any vein?

A. It simply ends up against another slip.

Q. Did you make any examination of any other shafts upon the hill except these two?

A. No sir, not outside of just simply looking at them.

Q. No careful examination?

A. No sir.

Q. You didn't go up nor down them?

A. No sir.

Q. Have you examined or looked at either of the maps that are on this board?

A. Yes sir, I have saw those maps.

Q. Please state how nearly the delineation of the Ophir shaft and the vein in it is correct, in your mind, on that section plan?

A. So far as I can see it is correct with the exception of that drift; is that drift supposed to run south?

Q. This drift here? Yes; you are looking south; that is the south side of the shaft, or a view of the southeast end, rather?

A. Yes sir.

368 Cross-examined by General JOHNSON:

Q. What mine did you say you were working on now?

A. On the Mary McKinnie, on the Birch lease.

Q. You ran a drift for the Ophir people, you say, about seven or eight feet?

A. I should judge that; it is the assessment-work for last year; I never measured it; I simply guessed at it, it might have been a foot more or a foot less.

Q. How many feet did they pay you for?

A. They didn't pay me by the foot; they paid me by the day.

Q. What did you run that for per foot?

A. I would not want to take it for less than about twelve dollars, the way it was breaking; it was spongy and tough; that is, to break it and hoist it.

Q. You finished that work on what day?

A. I think it was about the 3rd of January. I was paid for three days in January; I finished on the 3rd day of January.

Q. Did you hoist as much material as you broke down?

A. I should judge it was just about the same.

Q. In other words, you hoisted out about enough to take the place of what you broke down?

A. I judge that whoever done the work the year preceding had thrown their dirt back, and we left just about as much as we hoisted; we simply drifted and broke the rock and threw it back behind; it is there today; I suppose it is; it was the last time I saw it.

Q. How many days did you work there in December?

A. About fifteen. I was there longer than that but I was off several days; I was down here as a witness in court on an election contest; I was there fifteen days in December and three days in January.

Q. Did it take that many days to run seven or eight feet?

A. Yes sir.

369 Q. Eighteen days to run eight feet?
A. Yes sir.
Q. Less than six inches a day?
A. Yes, and there is lots of rock in that camp you would be doing pretty well to do that in.
Q. Isn't it very easy to let contracts for running a drift of that kind and hoisting material at ten dollars a foot?
A. Yes, and it is very easy for a man to get stuck on it, too.
Q. Twelve dollars a foot is about as high as is paid there for doing that kind of work, isn't it?
A. Yes; I don't know of any contract being let; in fact it is something I have not done for quite awhile, to work on contract.
Q. A great deal of work there is done by contract, isn't it?
A. Yes sir; there is not much work done in shipping mines by contract; most of that work is done by days' work, unless they have some outside work to do.
Q. How much of that seven or eight feet was run in three days in January?
A. Probably about a foot.
Q. About a foot?
A. Yes; probably not that much; I believe they stopped us early in the afternoon on the 3rd, and told us to bring our tools over, that we had done all the work they wanted.
Q. Had you measured it before New Year's?
A. Had I measured it before I started—no sir.
Q. You think about a foot was run after the first of the year?
A. Yes, probably that, judging from the way it had been run.
Q. Did your man work there Christmas week during the holidays?
A. I worked New Year's day myself; I didn't work Christmas; I didn't work Sundays, neither.
Q. Did you work days between Christmas and New Year's?
A. Yes sir.
Q. When you speak about miners getting off of veins, you don't mean such a vein as there is there in the Ophir shaft, do you?
370 A. Which end of it?
Q. From thirty-four feet down, say?
A. It would depend on what kind of a miner he is; there is a whole lot of difference in men; you would put some men on a vein that wide and they would lose it in a little while.
Q. That vein in the Ophir shaft is a well-defined crevice, isn't it?
A. Yes sir.
Q. A true fissure vein?
A. I should judge it was.
Q. Filled with dark material?
A. Yes sir, it looks like mineral, the filling of it, all the way through.
Q. From an inch wide to two or three inches?
A. Yes, six or eight.
Q. How wide is it down at about thirty-four feet?

A. I should judge it to be, as near as I can remember, two or three inches, something like that.

Q. Is it as wide as that?

A. About two inches.

Q. The hanging wall, then, and the foot-wall would be two inches apart?

A. Yes sir.

Q. And that is filled with a dark material that makes a dark streak that looks right on that wall just about like one of those streaks there, only darker, don't it?

A. It don't show up as plain as that.

Q. Isn't it just about as plain as that?

A. No sir.

Q. Would it be as plain as that border along there, distinguishing this from the paper?

A. To a miner, yes.

Q. You can see it right from the bottom of the shaft up as far as until it goes into the wall, can't you?

A. If you know what you are looking for you can.

Q. You can see it just as plainly as though you took a big
371 piece of chalk and marked right down that wall a line, can't you?

A. I wouldn't say that, but still it is plain to be seen; there is no question about that.

Q. How far in a good light could a person see that vein with the naked eye?

A. You could see it thirty or forty feet looking up and down the shaft.

Q. If this wall and the vein were exposed here you could see it clear across the street, couldn't you? That is, exposed in daylight?

A. I don't know; you could see it across the room easy enough.

Q. Is there any excuse for a miner leaving that kind of a vein or missing it or running away from it? Isn't there a crevice there that is distinct with two walls that any one can follow that knows anything about a vein?

A. Sometimes, even on the mine I am working on, while the vein is probably that wide, we are away from it; we left it; we simply sunk a straight shaft down and drifted back and caught the vein.

Q. You did that on purpose?

A. It was an accident in the first place and on purpose at other times; it is very convenient in sinking your shaft away from your vein where it is a slanting vein, to get out into the solid country rock.

Q. Did this vein cut right across the shaft and go right into the wall thirty-four feet from the ground?

A. No sir, it goes in very gradually.

Q. I mean on a dip, as that?

Q. There is no such dip as that.

Q. Did you measure the dip?

A. No, I measured it with my eyes, sometimes.

Q. I was not intending to be accurate with the pencil; on its dip it goes across and disappears in that wall don't it?

372 A. Yes sir, I should judge it would disappear at about the bottom of the timbers.

Q. Don't it disappear at a point thirty-four feet from the surface?

A. No sir.

Q. Can't you see that dark streak go right in there; just as you would see anything disappear that you can shove into a wall?

A. No sir, I can see it above that point I should say four or five feet; that was where I looked for it carefully.

Q. Four or five feet above that point?

A. Yes sir.

Q. Does the foot-wall go into the wall at that distance, thirty-four feet?

A. I don't see it after you leave the thirty-four-foot point; you can see the hanging wall.

Q. Do you mean to say that the hanging wall makes upon the face of that shaft a distance of four or five feet, so that it goes in four or five feet above the foot-wall, when the walls are only two inches apart?

A. You remember this vein is running vertically, straight, right at the edge of the shaft.

Q. Not so very nearly straight?

A. It is, according to my idea, by looking at it, and going past it for three weeks, up and down every once and awhile.

Q. You say, then, that along from twenty-three and twenty-four feet, along down to thirty-four feet where the vein is plainly visible there, that the hanging wall had been shot out in that shaft?

A. No sir; above that point.

Q. It has been shot out above but not between?

A. No sir.

Q. That is above twenty-three or twenty-four feet the hanging wall has been shot out?

A. I should judge it was; it seems to be a break in it right here, more of an open place going back to the timbers, like in go-

373 ing down they had probably put in their shots a little too far this way at that point, so that you cannot see it; it is a square break to a certain extent.

Q. You say above twenty-three feet the wall has been shot further in than it has below that?

A. Yes sir, at the place I looked at it, right alongside the ladder.

Q. If above that the hanging wall has been shot out, the shaft must be right in the vein, and on towards the foot-wall, must it not; the more you shot out the hanging wall the more you got into the body of the vein, didn't you?

A. If the vein was pitching into it—it is shot out right in the edge of the shaft, just where it starts under the timbers like, a few feet above it, probably; you remember that is going up, right below the timbers there.

Q. If the vein crosses the shaft towards the southeast corner there and goes up that corner, the more you shoot out in that corner there

at any point, the nearer you get to the vein, don't you? And if you shoot the hanging wall out you would get then right into the crevice?

A. Yes sir; the next thing you would come to would be the foot-wall.

Q. After you have shot away the hanging wall you would then come to the crevice itself, and beyond that the foot-wall wouldn't you?

A. Yes sir.

Q. And you say that in the shaft from twenty-three feet down to thirty-four feet, the hanging wall is shot out?

A. No sir, I said above that point.

Q. Above that point?

A. Yes sir; you can see a part of the hanging wall from, I should judge, thirty-four feet up there, a few feet; and then it is shot out further above.

Q. I don't understand that. Where you find a true fissure
374 vein like that filled with this discolored material, you say the walls are generally impregnated with mineral?

A. Sometimes; it is not always.

Q. That is not the rule, though, is it?

A. Of course there is lots of exceptions to it; it is not the case in some mines, but I know it is where I have sorted ore; it is the case on Beacon hill quite frequently.

Q. Is that impregnation generally above the hanging wall or below the foot-wall?

A. I should judge it would depend something on the pitch of the vein; if the vein were nearly straight, I would look for it on both sides, just the same; if it was pitching, I would look for it on the foot-wall side.

Q. That is, the impregnation would be more likely to be into the foot-wall than into the hanging wall?

A. Yes sir, that is my idea of it.

Q. It is an unusual thing for these solid porphyry walls to be impregnated to any great distance from the crevice where there is a well-defined crevice; isn't that true?

A. There is nothing particular strange about it; it is not the rule; you find it every once in a while but not as a rule.

Q. You were in the Tecumseh discovery shaft, were you?

A. Yes sir.

Q. You found some well-defined crevices there, didn't you?

A. I saw these two or three seams up and down the wall, an iron seam with a little of this, I should judge it is the same kind of rock, in between them that you see most anywhere in the porphyry.

Q. Did you see some crevices there?

A. I saw crevices, some running this way, vertically, that wide, the strongest one.

Q. How wide at the widest places were the crevices running vertically?

375 A. I don't remember that there was over an inch; it seemed to be kind of froze together all the way down.

Q. In some places about an inch apart, the walls?
A. I would not say that they was an inch apart; in this iron seam it may be an inch.
Q. Were they not in some places two inches and more?
A. I don't remember that.
Q. Did you examine these crevices up there and down as far as they are exposed in the shaft?
A. I looked at them, yes; going up and down the shaft.
Q. Just going up and down?
A. Of course I stopped to look at them.
Q. You didn't take any material out of those crevices and have it assayed?
A. No, I didn't help to do it. While I was down looking at the bottom it was taken.
Q. If, as a matter of fact, these crevices will bear mineral that will assay from one to four or five dollars, you would pronounce them veins wouldn't you?
A. They might be veins.
Q. What do you understand to be a vein?
A. My understanding of it is a fissure or crevice filled with mineral, mineralized matter.
Q. Need it be filled with mineral?
A. It might be.
Q. If it carries mineral in appreciable quantities?
A. It might be a crevice without any filling in it.
Q. You find the crevices there distinct?
A. Yes sir.
Q. Several of them?
A. Yes, I noticed three.
Q. Didn't you find that they were regular and continuous, so far as you can see; that is, you cannot look into the walls where they are not exposed, but as far as they have been explored, don't
376 you find they are regular, continuous and parallel to each other?
A. I noticed one that seemed to be continuous; the others I didn't consider such.
Q. Did you find any that were not continuous so far as they were exposed?
A. I don't remember but one that seemed to be continuous; I noticed it all of the way down, and I think it was the furthest one straight in the shaft.
Q. That is exposed for about thirty feet isn't it?
A. I should judge something like that.
Q. Now that is a crevice; if it bears mineral what is there wanting to its being a vein?
A. That would be a vein in a certain sense of the word, I should judge.
Q. If that horizontal vein was continuous and a regular fissure and bore mineral in appreciable quantities, you would call it a vein, wouldn't you?
A. Yes; it would be what I would term a blanket vein.

Q. Did you do any work in that shaft for the defendants or any one?
A. Which shaft are you talking about?
Q. In the Tecumseh shaft?
A. No sir.
Q. Did you put any shot there anywhere?
A. No sir.
Q. Did you know of any one doing it?
A. No sir.

Redirect examination by Mr. THOMAS:

Q. When you were down here, you were down here two or three days while this work was going on, did you put a man in your place?
A. Yes sir.
Q. In doing this work did you furnish your own powder and fuse, or was that furnished by the company?
A. It was furnished by the company.
377 Q. Do you know how much was furnished during the time you were there?
A. I know there was plenty of it; I always had plenty of it.
Q. Enough for the purpose?
A. Yes sir.
Q. You were asked whether if a vein with these fractures, these fissures, should contain material that runs three or four dollars in gold per ton, you would consider it a vein; suppose that in the length of thirty-eight feet there is but one place or but one or two places very close together where any such assay can be obtained, and the rest barren; what would you then say about that being a vein?
A. I would not consider it a vein in a case of that kind; I was judging the question to be providing it was all filled.
Q. Is, or is not the continuity of this deposit essential to a vein?
A. Certainly; it ought to be continuous to be a vein.

Recross-examination by Mr. JOHNSON:

Q. Are not many of these veins barren for hundreds of feet in well-know- paying mines in the Cripple Creek district to your knowledge?
Q. They have barren places in them filled with gangue matter more or less.
Q. Don't they have barren places continuing for long distances?
A. No sir, not in my experience at all; it may for a few feet, and then you will strike the ore chute again.
Q. Does it cease to be a vein when you get to one of those spots?
A. You strike a horse in the vein, I suppose, or something of that kind.
Q. How far would a vein that was carrying a rich body of mineral have to be barren in order to be condemned by you as a
378 vein, in your judgment?
A. No particular distance, I should judge; but if it had

been carrying mineral where you had been working it, you would have it proved pretty conclusively that it was a vein.

By Mr. THOMAS:

Q. Isn't it a fact that these barren places of which you speak are between bodies of pay ore, and that the barren places will assay some appreciable quantities?

A. Yes, they save the screenings sometimes in a case of that kind.

379 CHARLES J. MOORE, being first duly sworn in behalf of the defendants, testified as follows:

Q. Where do you reside?

A. Cripple Creek.

Q. How long have you been a resident of the Cripple Creek district?

A. About four years.

Q. How long have you lived in Colorado?

A. About 18 years.

Q. What is your pursuit in life?

A. Civil and mining engineering.

Q. How long have you followed the business of a civil and mining engineer?

A. For over 30 years.

Q. In what sections of the country outside of Colorado have you practiced the pursuit of your profession?

A. In various parts of the United States and Europe.

Q. Have you during that time constantly followed that business?

A. I have.

Q. During that time how general has been your examination of mines and vein formation through the country?

A. I have been superintendent of mines down in Virginia—iron mines; and coal mines in Iowa and gold and silver mines in Colorado since 1879, in the counties of Lake, Pitkin, Summit, down in the San Juan, San Miguel, El Paso county, Park and others.

Q. During that time have you occupied the position of consulting engineer for mines and mining claims?

A. Yes sir; in various companies; and I am at the present time managing and superintending various properties.

Q. How general has been your acquaintance with the Cripple Creek mining district since 1893 and '4?

A. I have done a good deal of work there personally, and
380 for other people, as manager and superintending and leasing on my own account and have done, also, some patent work, applying for patents; I still hold a commission as an United States deputy mineral surveyor, and I have made a great many examinations and reports on various properties; some of the leading properties in Cripple Creek. I have been consulting engineer for the Portland Gold Mining Company and also for Mr. Strattan on the Independence.

Q. Are you acquainted with the ground that is in controversy in this case?

A. I am.

Q. Known generally as the Tecumseh and Ophir locations?

A. I am.

Q. How long have you known of that section of country upon which these claims are located?

A. I have known it generally for the last four years and especially about these locations since May of last year.

Q. Did you at that time assume to make an examination of the two claims or the workings of the two claims?

A. I did.

Q. About what time did that examination begin and end?

A. I went on the ground first on the 19th day of May, 1897, and next on the 26th day of May and last on the 31st day of May; and I was on the ground recently, a week ago.

Q. Of what did your examination consist when you were there first, in May of 1897?

A. The Ophir shaft in the first case and a shaft to the north of that, which I understand is called Tecumseh number 4; and the various workings connecting the two shafts running northward from the Tecumseh number 4; also the Tecumseh discovery shaft; and I also examined two or three other shafts in their neighborhood.

Q. Before calling your attention to your examinations I
381 will ask you who made that map called the section map of the southeast end of the Ophir shaft?

A. I made that map from notes and measurements taken upon the ground.

Q. From an examination of the shaft?

A. From an examination of the shaft.

Q. What is intended to be represented by the plan on the same map and to the right of the section?

A. That is intended to represent a plan of the bottom of the shaft and the way in which the drifts start out from the northeast and southwest corners in the bottom of the shaft; it also shows the manner in which the vein, which is designated by a red line on that plan, crosses the shaft. It crosses it diagonally from the southwest corner to the northeast corner, or very nearly so.

Q. While I think of it I will ask you why the red coloring is used as a designation of the vein?

A. It is merely a conventional color which engineers usually use in order to make it the most striking feature on any drawing and clear to the eye. It does not appear anything like that in the ground.

Q. In no mine?

A. In no mine.

Q. What is the scale of this section map?

A. I think that is three feet to the inch.

Q. And this one?

A. The scale is placed upon the upper portion of it.

Q. Please tell the jury what this drawing upon the brown paper is that you placed upon the frame just a few minutes ago?

A. That represents four views of the Tecumseh discovery shaft; the two longer sides being the northeast and the southwest sides of
382 that shaft, showing the timbering, and showing such seams or cracks or joint planes or anything similar to a vein which I found in examining that shaft; the two larger drawings on the sheet represent the two sides of that shaft as though the shaft was cut through the middle by a vertical place, and you sit a short distance off and look at the north side as it was facing you in the earth and then turn around and look upon the other side. The two smaller drawings on the right-hand side of the sheet—one of those represents the top plan of the shaft as though you were looking down a few feet above it in the air. The lower of those two drawings represents a plan of the bottom of the shaft in the same way—as though you were looking at it from a few feet above the bottom; and it also shows the drift that runs out from the east end of the shaft.

Q. That is this would be the bottom of the shaft?

A. That would be the top of the shaft and that lower one would be the bottom.

Q. That drift running there, as I understand you, is identical except that that is a plan looking downward while this is a section?

A. Yes sir.

Q. And the scale of that is marked three feet to the inch?

A. It is the same scale as the other shaft.

Q. Now, commencing with the Tecumseh shaft, I will ask you to state what you found there as a result of your examination, and state it in your own way, and if you desire, refer to the plan.

A. The first shaft from the surface is timbered as shown by these horizontal lines; that represents the timbering behind which nothing could be seen; the sides of the shaft below the timbering have the usual irregularities of any untimbered shaft in that district; the various small changes in the side of the shaft being
383 due to the rock naturally breaking against the natural joint of the rock as it always does, so that at this point marked "C" upon the view of the southwest side, and at the same point on the view of the northeast side the shaft is a good deal wider than at any other portion, because the rock is broken against a nearly horizontal joint plane and is therefore much wider than it is up above. At the bottom of the shaft the drift already mentioned is shown running east for a distance of ten feet from the nearest side of the shaft; also the same irregularities as the sides of the shaft present at various joints. I took careful sketches on the spot of all the leading joints that I could find or seams of any nature in that shaft. I found running down from the lower part of the timbers where you can first see the natural surface the side of the shaft, the natural ground, I found a seam which I now follow down on the west side of the shaft and have marked "B." That same seam is shown following down my pointer now to this point about 8 feet above the bottom where it disappears in the wall. I found another

seam marked "A" which extends from the timbers with slight interruptions down to the floor at the bottom of the shaft, which is marked A. That same seam is shown on the opposite side of the shaft by this brown line. I found a third seam dipping about parallel with these former two just mentioned which is marked "C" and starts at a horizontal joint twenty-one and a half feet below the collar of the shaft and runs downward in the same way into the floor of the drift at the bottom of the shaft. That same seam "C" is marked upon both sections. I found at the east end of the drift which is shown upon the plan by the lower drawing in the
384 right-hand corner of the sheet, a seam which is marked "D." That same seam shows for a few feet on the face of the drift running approximately parallel with the others. Near the line "C" I found on the south side of the drift three or four little parallel seams that did not show upon the north side. Besides these that I have mentioned having approximately a dip of 77 degrees from the horizontal, or 13 from the vertical, I found a number of horizontal joints which are indicated by these horizontal lines, or nearly horizontal lines. These seams as I found them on the opposite sides of the shaft are correctly delineated upon each of these sketches.

Q. You have projected the lines or extended some of these lines both horizontally and vertically; you know the actual developments in the ground; do you see the seams beyond the developments or is that conjectural?

A. That is conjectural; wherever the lines are shown broken. In the walls, of course, we cannot see them; we can only see the lines, the various joint planes as actually shown from wall to wall inside the shaft. This specially prominent horizontal seam at the point marked "C" has been picked into apparently a little bit beyond the general line of the shaft; that is the most prominent seam that I can find in the whole shaft.

Q. Either vertical or otherwise?

A. Either vertical or otherwise, and it shows an opening of probably about four inches—three to four inches.

Q. What is the prevailing rock in which that opening is made?

A. It is all in what the miners call porphyry, that is the general country rock in the Cripple Creek district.

Q. I will ask you what you understand by the term vein or lode?

A. I understand, speaking generally of course, there are a
385 good many veins or lodes, but I understand it generally to be a body of mineral in the mass of the mountain having continuity.

Q. That is a definition, you think, sufficiently comprehensive to embrace the different kinds of ore deposits known as lodes or veins?

Q. Yes, without going into individual veins.

Q. State whether or not in the discovery shaft of the Tecumseh you found a vein or lode following that definition in any particular?

A. I did not.

Q. What do you call the cracks or seams which you have delineated upon that sketch?

A. I call them the ordinary joint planes of the country.

Q. What do you mean by that expression, the ordinary joint planes of the country?

A. All rocks naturally crack into a series of joints; some rocks have a great deal more regularity than others but all rocks have joints and those are simply the natural cracks that the rocks themselves show.

Q. What is presumably the cause of those fractures, contraction or cooling?

A. Generally cooling; sometimes fractures of that kind are simply started by frost near the surface and extend downward a little deeper and a little deeper year after year.

Q. Is there any distinction, so far as a vein is concerned, or the appearance of a vein is concerned, between the series of cracks that are more or less vertical and those which are more or less horizontal in their character?

A. They are both the same; they are stained on the edges of the joints by iron and manganese which is universal through all rocks.

Q. Are they or are they not common to the general country
386 rock of that hill?

A. They are.

Q. Or are they peculiar to those shafts?

A. No sir.

Q. Did you in your examination of this ground, this particular shaft, take or assist in taking any pieces of rock for assay?

A. Yes sir, we took several.

Q. Please describe how they were taken, when and by whom?

A. There were four samples taken from the main series of joints, going down approximately vertical. The members of the party if I recollect rightly last May, were Mr. Dahl, Mr. Boehmer, Mr. Doyle, Mr. Burdett and Mr. Smith, besides myself.

Q. Which Mr. Smith?

A. James F. Smith. These samples were taken for the purpose of satisfying us whether these joints actually carried any values at all; we also took samples from the rock between the joints, to see whether that could be called, in any way, from its values, vein stuff.

Q. Please state who broke the samples, and what was done with them?

Q. I think there were two or three of us that broke occasionally, but I think Mr. Dahl broke the majority of those samples.

Q. Were any specific or arbitrary places selected for the taking of those samples?

A. We took samples at distances of five feet.

Q. With reference to those cracks state whether the rock was taken from that part thereof which formed the cracks themselves or away from them, or how?

A. We took the samples from the cracks themselves, assuming that the stained material was the most likely to carry values if any.

Q. How was this material obtained—with a pick?

A. By a common hand pick, prospecting pick.

Q. In what receptacles was the material placed?

387 A. They were all placed in clean canvas sacks which were furnished and held by the assayers, Mr. Doyle and Mr. Burbett.

Q. They would hold the sacks and catch the material after it was broken from the walls?

A. Yes sir; in some cases they were not able to get close up to the point; it was not well timbered; there were only a few stulls here and there and sometimes a man would have to stand on a stull and break a piece and drop it down to the assayer immediately below him who put it in a sack.

Q. Was there anything placed in the bags holding these samples other than the pieces of rock forming the samples?

A. Nothing whatever.

Q. What was done with the bags after the samples were placed in them?

A. They were left in the possession of the assayers who had them in the first case and retained them there and from them, I understand, they made their assays.

Q. Did you take more than one line of samples in that shaft?

A. In the Tecumseh shaft?

A. Yes; yourself or in your presence?

A. No, not in my presence.

Q. Were the points from which these samples were taken when you were along marked or designated upon the plan map?

A. I think they are marked upon the map with small black dots.

Q. Did you attempt to take the strike or course across the country of these cracks from such parts of them that could be seen from the shaft?

A. Yes sir, of these two marked A and B; they are correctly shown upon the top plan of the Tecumseh shaft.

Q. As shown by the red line here?

A. That is about the position yes; they are also shown

388 upon the plan of the top of the Tecumseh shaft, as they cross there, A and B, that small plan to the right-hand side of the section.

Q. How is that calculation made?

A. Those were determined by Mr. Smith standing upon the outside of the dump and dropping a plumb-line down to the point where line A for instance, first appeared underneath the timber on one side; and then he took the exact position where the line first appeared on the other side of the shaft opposite; and in that way determined the course of those cracks A and B very carefully and correctly.

Q. Proceeding now to the other shaft, the Ophir shaft, please give a description of that in your own language and tell the jury what you found there, and if you desire, you can, with the permission of the court, use the map?

A. The right-hand section upon the frame represents a vertical section through the Ophir shaft showing the timbering for 16 feet extended from 16 feet to the top and downward; and the lines of the shaft, the northeast and southwest sides, and also the mouth of the south drift in the bottom of the shaft. The red lines upon that sectional view represent the position of the vein, the Ophir vein, as shown in that shaft; from the bottom it crosses the shaft diagonally going upwards, until it gradually disappears in the east wall. The irregularities of the walls of that shaft are similar, though not as great, as those in the Tecumseh shaft, and are due to the same cause, the natural breaking of the rock against the natural joints while being blasted. At a point about 27 or 28 feet from the collar a well-defined wall of the crevice which forms the centre of that vein runs into the side of the shaft, a little further than the average width of the shaft, being so well defined.

389 The rock is broken against that and exposes it quite clearly; in fact, about a foot or a foot and a half from the average vertical side of the shaft. The rock above that extending to a height of 21 feet from the collar is heavily stained, similar in all respects to the mineral matter contained in the main crevice of the vein and our assays were started at that point, being 21 feet from the collar of the shaft and taken at a uniform distance of five feet all of the way down to the bottom of the shaft, or rather to the roof of the drift; we took no assay in the actual bottom of the shaft because there was so much debris in there. The vein first appears on the southeast corner of the shaft and gradually works across coming down from above; the vein first appears on the southeast corner and gradually on its dip works across the shaft until at the bottom it extends from the southwest corner to the northeast and the drift at the bottom run to the northeast connecting with the Tecumseh shaft number 4 upon the same vein, and to the southwest a distance of thirty feet showing the vein very clearly along the roof of the drift and in the face. We took assays also in various places along the roof of the drift to the southwest as well as that to the northeast, running along the course or strike of the vein.

Q. How were the samples selected from that shaft for assay?

A. They were taken from the vein as we observed it.

Q. I know; but I mean the process of breaking them, putting them in bags, etc.?

A. In the same way as the Tecumseh shaft, precisely.

Q. Precisely the same way?

A. Precisely the same way.

Q. I will ask you if there was more than one line of samples taken for assay from that shaft?

A. There was.

390 Q. Did you participate in taking both lines?

A. Yes sir, I was present on both occasions.

Q. And in each instance were they similarly taken?

A. Taken in the same way both times.

Q. To whom were the samples given; that is to what assayers on those two occasions?

A. As a piece of rock was broken it was given to Mr. Doyle and a second piece of rock was broken from the same place and then given to Mr. Burdett and in each case that was the process observed; but in many cases Mr. Doyle and Mr. Burdett were able to get right up to the point where the rock was dropped directly in the sacks when it was broken.

Q. Was anything placed in the sacks except the material that was broken from the walls or the vein?

A. Nothing.

Q. Was any difference observed in the picking of the sample at the 21-foot point which was given to Mr. Doyle and that of the sample that was given to Mr. Burdett?

A. Yes sir.

Q. What was it?

A. In this way; at the 21-foot point we would sample up and down for a height of about one foot, from 21 to 22 feet and Mr. Doyle was given that sample or took the sample that came right out of the corner of the shaft at that particular place and Mr. Burdett took a sample extending all around the sides of the shaft.

Q. So that in one instance the sample taken was local?

A. It was local.

Q. And the other extended around the shaft?

A. It did.

Q. Is there any doubt about that vein being in the shaft at that 20 or 21 foot point?

A. Not to my mind.

391 Q. What is known as an impregnation?

A. An impregnation is due to the percolation of waters into the general mass of the rock and making a chemical change in the rock itself.

Q. When that is the case does or not the ore blend with the wall rock and shade off imperceptibly into the country?

A. It does.

Q. Is or is not that a common form of ore occurrence and ore deposit in Cripple Creek?

A. It is.

Q. What is a dike?

A. A dike is a molten mass which fills a pre-existing fissure in the earth's crust.

Q. Is there any evidence of the existence of a dike either in the Tecumseh discovery shaft or in the Ophir?

A. No sir, not so far as I could see.

Q. What have you to say with reference to the occurrence of veins or ore matter in parallel seams or fissures in that camp?

A. That is a frequent phenomena in the Cripple Creek district. I have so found; it is generally associated with veins that are associated with dikes especially with phonolite dikes. I would explain the reason: The phonolite rock naturally splits in a series of very thin sheets like the leaves of a book, and when the fissure is formed through a rock of that character it naturally splits to the nature of

the rock itself, and that being natural, it splits with a slatey cleavage and forms very narrow parallel sheets.

Q. Is there any resemblance or similarity or relation between that condition of things as you have observed it and anything that appears in the Tecumseh shaft?

A. No sir.

Q. Generally speaking, how close together are these parallel lines of which you speak when they occur in those formations in
392 that camp, generally speaking?

A. They are very close indeed; from a quarter to a half inch apart, sometimes an inch.

Q. Are you familiar with the Ingham vein?

A. Yes sir.

Q. From actual examination?

A. Yes sir.

Q. And inspection?

A. Yes sir.

Q. Is that associated with a dike?

A. It is.

Q. Are you acquainted with the Elkton and Raven veins on that hill?

A. Yes sir; the Elkton I know better than the Raven.

Q. From examination?

A. From examination.

Q. State whether or not the veins there are associated with dike formations?

A. Both of them.

Q. How far are those mines from the one which is here in controversy?

A. I should judge about three-quarters of a mile to the southeast and east.

Q. That is the Elkton and Raven are southeast of these properties?

A. Yes sir.

Q. What is the slope of the hill where these mines are located?

A. The slope where the Ophir and Tecumseh are located?

Q. Yes; what is the direction, I mean?

A. The direction of the slope is to the southwest.

Q. Do veins or lodes in the Cripple Creek district pursue an uniform dip or do they change in anywise at the surface or as they approach the surface?

A. They frequently change near the surface and sometimes for two or three hundred feet down. In the Pike's Peak, for instance, on which I am working at the present time, there are five changes of dip in the first three hundred feet of depth.

Q. Generally speaking, do they become steeper or flatter as
393 they go down?

A. They generally steepen although that is not an invariable rule.

Q. When a vein dips with the contour of the hill is the top of it

liable or not to be more perpendicular than where it dipped into the hill?

A. It is liable to straighten near the top.

Q. Is there any known reason or theory for that?

A. Simply the general movement of the surface.

Q. Is it or not a fact that the sinking of shafts which are vertical when sunk occasionally are pushed over from a vertical by reason of the gravitation of the hill?

A. Yes sir, I have known that to happen in some districts.

Q. Notably in Aspen?

A. In Aspen, especially.

Q. What other shafts, if any, upon that hill and within the locations have you *have* examined?

A. I went down this unmarked shaft which is just below the letter R in the word Ophir, in the general plan map.

Q. That is what the plaintiff calls number 3?

A. I was also down that shaft which is also unmarked about 75 feet to the eastward of the Ophir discovery shaft on the same plan.

Q. That is the Tecumseh Number 2; what was the condition of the Tecumseh Number 2 at the time you looked at it?

A. It was caved in at the surface for some 14 or 15 feet down, and you could only just see the upper portion, the uncaved portion of the shaft for about five feet.

Q. So that there was enough of it that was accessible to enable you to judge whether it was upon a vein or not?

A. Scarcely; but it might be.

Q. The other shaft was sunk upon that?

394 A. The other shaft was sunk upon a vein.

Q. And the drift as well?

A. Yes sir, a drift 36 feet long at the bottom; also upon the same vein.

Q. Did you make any inspection of the working shaft of the Tecumseh Number 4?

A. Only down to the level of the connection with the Ophir shaft, the Ophir drift.

Q. That is to the level of the bottom of the Ophir shaft?

A. Yes sir; and subsequently, a few days ago, we went down to the next level below that.

Q. What is the appearance of that shaft so far as the vein is concerned?

A. It shows the vein clearly in that shaft; evidently the same vein in the Ophir discovery.

Q. You can see it through that shaft from the point where it first appears down to this level as far as you can examine it; does it appear through that shaft from where it is first visible down to this level at the bottom of the Ophir shaft?

A. Yes sir.

Q. Is there any obstruction in that drift leading from the bottom over into this working shaft?

A. It is half filled with waste so that you have to crawl on your hands and knees for some distance.

Q. Is there any barricade there?

A. There are three sticks of timber nailed up to prevent any person going through, I presume.

Q. That is about what distance to the north of the bottom of the Ophir shaft?

A. I think it is 45 feet if I remember the measurements correctly.

Q. I believe you said that the vein appeared in the drift that you have sketched there upon your section map of the Ophir shaft as is there delineated?

A. It does.

Q. Does that represent the top of the drift or the floor of it?

395 A. That represents the top of the drift.

Q. As it would appear looking down from the top?

A. Looking down from the top.

Q. Please state whether La Conte, Phillips and Von Cotta are recognized authorities upon the subject of mines and vein formation?

A. They are.

Q. Did you break any pieces of rock from any portion of the Tecumseh shaft which you have with you?

A. No sir.

Q. Did you assist in breaking any?

A. I assisted Mr. Darby, I think, a little, taking the rock out.

Q. Have you them with you?

A. I have.

Q. Please produce the pieces that were taken from the Ophir shaft?

A. From the Tecumseh shaft?

Q. I mean the Tecumseh shaft, and indicate as nearly as you can upon the section plan where they came from and what they are?

A. Those two samples marked A and B it is a fair average of the general rock shown in the Tecumseh shaft and came from the lowest portion of the shaft between A and B opposite this drift at the bottom.

Q. What is that rock?

A. That rock is the ordinary porphyry; technically it is called breccia.

Q. Ordinary country porphyry?

A. The country porphyry of the district.

Q. How near to either of the fractures or seams mentioned was that specimen taken from?

A. It was taken about half way between seams A and C.

Q. About midway between them?

A. There was one piece came from the south side of the

396 shaft close to seam C; I might make it a little clearer by giving the exact spot. It came from between these two or three small seams close together; it was right in between those marked on the south side of the drift pretty close to the shaft; that is sample marked A.

Q. Have you with you any pieces of rock from the Ophir shaft?

A. I have a piece here that was taken out of the drift at the bottom in the roof of the drift running south from the bottom of the Ophir shaft.

Q. That is a piece of vein stuff, do you say?

A. That is a piece of vein stuff, yes.

Q. Was that broken from a space between the crevice or within the crevice or was it from outside?

A. That would be about the heart of the crevice.

Q. Are you familiar with the geological report of Penrose and Cross upon the geological conditions of the Cripple Creek district?

A. Yes sir.

Q. In the illustrations given by that report of the existence of laminated veins or cracks or fissures and crevices close to each other, state whether or not they in each instance give those conditions associated with dikes or otherwise?

A. I think almost all the illustrations are those of veins that are associated directly with the dikes; in some cases the vein is in the dike, and in others alongside of it; but the dike is a portion of the vein structure in each case.

Cross-examined by General JOHNSON:

Q. These specimens that you have produced, as I understand you, came from within these parallel fissures that you found?

397 A. In between the joint cracks, yes; this was in between two and right alongside of one; this represents the face of one of those.

Q. Why didn't you take this from adjacent to those joint cracks, as you call them?

A. This is exactly adjacent to one of them; it is the face of one of those cracks.

Q. Where was the other from?

A. The other was from between crack A and B; about midway between them.

Q. You say one of those represents a part of the wall of a crevice?

A. Yes sir.

Q. And that was taken at what distance from the crevice?

A. Probably two feet—a foot and a half or two feet.

Q. Do I understand you to say that Cross and Penrose in their report always associate parallel veins with dikes?

A. Nearly always; in a majority of the illustrations it shows that.

Q. Examine that one on page 184?

A. It is an illustration of the Ingham vein; that one, figure 18 on page 184 does not show a dike but there is one associated with that vein as I know from personal observation.

Q. Will you state how far apart these parallel veins are on that illustration?

A. There is a distance shown by this diagram of seven feet between the two veins.

Q. Seven feet?

A. From center to center.
Q. These heavy dark lines are the veins, are they not?
A. Yes sir.
Q. Is it not a characteristic feature of the veins on Raven hill that these small parallel veins appear?
A. You mean more characteristic than the other hills of the district?
Q. Not necessarily?
A. No sir.
398 Q. My question don't imply that necessarily?
A. It is characteristic of those veins associated with dikes.
Q. Will you please answer my question?
A. It is of all veins associated with dikes on Raven hill.
Q. It cannot be discovered or known anything about whether there is a dike within the vicinity of this discovery shaft from its present development, can it?
A. The Tecumseh discovery?
Q. Yes?
A. No sir.
Q. The dike might be a long distance from there?
A. Then it would not affect the vein.
Q. How far do those parellel veins extend out from dikes when they are found associated with them?
A. Only a few feet; that is laterally from the dikes.
Q. Don't you find mines on Raven hill where these parallel veins are found for hundreds of feet along together?
A. Following along the course of a dike, yes.
Q. As a matter of fact do those parallel veins follow along the course of dikes; don't they cross the dikes?
A. Occasionally; but they generally follow along the course.
Q. Don't they more generally run out at some kind of an angle from the dikes?
A. They leave them and return to them but generally they follow the average course of the dike itself.
Q. Don't they frequently cross the dikes at right angles?
A. No not frequently; they cross at acute angles; I can refer you to an illustration of veins crossing the dike at the Independence mine; I think it is page 200.
Q. That is where they cross the dikes?
A. Yes sir, that is a plat I prepared for that work, showing
399 the relation of the Independence vein and dike and the manner in which the vein crosses the dike and leaves it and the occurrence of it, etc.
Q. Is that shown by a diagram?
A. Yes sir; the diagram shows the vein crossing the dike on two different levels.
Q. If you find these parallel veins although they might be generally and in a particular case associated with a dike, do you have to wait to discover the dike before you can pronounce them veins?
A. No sir.
Q. Veins, although associated with a dike, might be distinct fis-

sures and may be located upon and may be mined before the dike is found, may they not?

A. Certainly.

Q. Now I will ask you the general question again: whether it is not the prevailing feature, particularly on Raven hill, that these mines are found in parallel veins sometimes very small and sometimes very close together and again larger and further apart?

A. I know as many instances of one kind as of the other.

Q. What do you mean by one kind as the other?

A. Those in which there are a series of parallel cracks, what we call laminated structure, in the vein, and those in which there is not that structure.

Q. You think they are about equally divided on that hill?

A. Perhaps there is a little larger proportion of laminated structure in Raven hill than there is of the other; but, as I said before, I don't know of any instances where they are not associated directly with dikes.

Q. I didn't ask you that question; we are not hunting dikes here at all?

A. No, but you repeated the question as I understand it.

Q. Don't those gentlemen state a large part of the ore from
400 those claims is derived from veins in one main zone of parallel fissuring?

A. What veins are you speaking of?

Q. Raven hill on page 181; is that true or not?

A. I think that is probably true.

Q. Then you don't know as many where that condition does not prevail as where it does, do you?

A. Very nearly as many, yes.

Q. He says a large part?

A. Yes sir; that doesn't mean a majority.

Q. It doesn't mean a majority?

A. No, not necessarily.

Q. "The workings of the different claims are not connected and they are not necessarily all on the same fissure, but there is very little doubt that they are all on a series of close parallel fissures forming a fissure zone in which one fissure may carry most of the ore in one place and another may carry most in another place"?

A. Yes sir.

Q. Are there not mines on Raven hill where they have this parallel fissuring and where they have yet discovered no dikes at all?

A. I don't call to mind a single instance at present.

Q. What is the distinction between a dike and a vein?

A. A dike is originally a mass of molten rock which filled a crevice in the earth's crust.

Q. Do dikes bear mineral sometimes?

A. They do; they have had big veins.

Q. So far as the formation is concerned they have the same as veins, do they not, except the filling?

A. Very largely; a certain class of veins, yes.

Q. A dike is a fissure in the country rock, is it not?

A. A dike is not a fissure; a dike is the filling of a fissure.

401 Q. There cannot be a dike without a fissure, can there?

A. No sir, the fissure must be there first.

Q. When it is filled with barren material you call it a dike?

A. Yes sir.

Q. And when it is filled with mineral-bearing substance you call it a vein?

A. Not unless it is carrying vein material that is worth following and worth exploring.

Q. That's what I say—when it is filled with mineral?

A. Having values.

Q. The formations, so far as the crevice in the rock is concerned, is about the same?

A. Yes sir, so far as the original fissure is concerned.

Q. It is supposed to have been produced originally in the same way?

A. Yes sir.

Q. Either by an upheaval or some cooling process?

A. Yes sir, generally convulsions accompany a volcano.

Q. Is there any especial difference between a dike and vein except the filling of it, in your judgment, either in the manner in which it was created or in its appearance?

A. There is a good deal in its appearance but not in the manner in which it was created.

Q. Which is generally the larger?

A. Dikes; but that is not an invariable rule; it is different in different districts; in Cripple Creek the dikes are larger as a rule than the average size of the veins.

Q. How can you distinguish a dike from a vein except by assaying the filling of it?

A. A dike is a homogeneous rock of a certain character

402 extending through the country for considerable distance and veins are of two or three kinds; those in which the filling of the veins is entirely within the walls of the crevice having an entirely different appearance and different material from what the dike has; and it does not present the same homogeneous character as a dike.

Q. Then you would not call all crevices that are barren of the precious metals dikes?

A. No, certainly not.

Q. They would have to be filled by a particular kind of material?

A. A particular kind of rock, yes.

Q. What kind of rock would that have to be?

A. Any one of the large number of eruptive rocks.

Q. Do any of those crevices in the Tecumseh discovery shaft answer the description of a dike?

A. Not one.

Q. Do you find anything in the Ophir discovery shaft resembling a dike?

A. I do not.

Q. Have you been down in the working of the Tecumseh shaft number 4?

A. That is the one north of the Ophir discovery?

A. Yes?

A. Yes sir, a portion of the workings.

Q. Have you been through all the drifts and levels in those workings?

A. No, not all.

Q. In so far as you have explored those workings, do you find any dike?

A. I think not; I didn't observe any.

Q. For what reason, if any, can you give it is necessary either in the creation or occurrence of these veins that these parallel veins should be associated necessarily with dikes?

A. In all cases, as I stated in my direct examination, a fissure breaking through a rock will partake of the character of its breaking, and partake of the natural cleavage of the rock itself;
403 and phonolite which forms the great majority of the material of the dikes in the Cripple Creek district breaks with that peculiar laminated structure; if you break a piece of rock it breaks in a series of parallel thin sheets, and when a fissure breaks through or accompanies a dike of that kind, the fissure breaking through the country on that character of rock breaks in the same way into a series of parallel, very closely connected cracks.

Q. But the breaks were all made there before they were filled, were they not?

A. No.

Q. They were not?

A. No sir; the fissures of the dike are there first but the fissuring of the vein is pretty frequently, in fact I think in the majority of instances, later than the dikes; so that in many cases the fissures break through the dikes either diagonally or running right parallel right side of the dikes partly in the material itself, and therefore must be later than the dike that was there first.

Q. That was not my question; must not all fissures be created before they are filled?

A. Certainly.

Q. And your theory is, as I understand it, is that the dikes were created first?

A. The dikes filled the first set of fissures, yes sir.

Q. Whether the breaks occurred at the same time or not the main break, the larger one, that is usually called the dike is filled first?

A. Certainly; the dikes in the first fissure created.

Q. Is it your opinion that the dikes were created distinctly first or that the break that constitutes the dike is older than the break that constitutes the veins?

A. Yes sir.

Q. What is your theory as to whether the dikes were filled
404 at the time or either shortly after their creation, after the break occurred?

A. I think very shortly after the crevices were created. That is not an invariable rule because occasionally you will find alongside the dikes between the dike material and the wall of the crevice which it follows, you will find a few particles of foreign matter which must have fallen into that open crevice before the dike came there; that is matter foreign to the walls and different entirely to the dike, showing that the crevice must have been open for some little time at least before the dike filled it.

Q. Is there anything of that same character to indicate the process or period in which the veins were filled?

A. There is occasionally; you will find some foreign matter.

Q. The general theory is that these dikes, however, were filled more rapidly and at an earlier period than the veins?

A. Yes sir.

Q. You have given this whole subject a great deal of study, have you?

A. Yes sir, as I have been mining practically for some time.

Q. You have had occasion to examine a great many properties to qualify yourself as a witness, haven't you?

A. Yes sir.

Q. And hasn't that been for some years quite a branch of your business?

A. Occasionally, yes.

Q. I believe you spoke of those crevices in the Tecumseh discovery shaft as joint planes?

A. Yes sir.

Q. What is a joint?

A. A joint is a natural crack in the rock which is formed generally in eruptive rocks by the contraction in cooling in a molten state.

Q. You find that in all porphyry, do you not?

A. In all porphyry.

405 Q. Do you find it in granite?

A. Yes sir.

Q. In other words, wherever you find rock of any kind that is in layers that is not an absolutely solid mass, you call the creaks joints?

A. No, it does not necessarily have to lie in layers.

Q. Wherever there is a break in any kind of rock it is a joint isn't it?

A. Yes sir, a break unless they are the regular bedded structure or the stratified rock.

Q. You find these joints in all rock, do you not?

A. In all rock yes.

Q. The distinguishing feature of a joint is, that it is irregular isn't it, in direction, I will say?

A. I have not considered that; that was a special feature; it is a fact, though; it is very largely irregular, yes sir.

Q. A joint may run at any angle, may it not?

A. Yes sir.

Q. Thus making the rock in all shapes?

A. Yes sir.

Q. That is what makes the rocks irregular, because the joints are irregular, running in every direction?

A. They break according to the joints.

Q. You find that on Raven hill in the Cripple Creek district everywhere that the porphyry is broken up and blocked out by these joints, don't you?

A. That is true.

Q. Then again, you will find a more regular breakage, a more regular crevice that cuts vertically or horizontally through the country rock and practically ignores these joints, don't you? Cuts right through them?

A. Yes sir.

Q. Breaks straight through the country rock, irrespective of these joints?

A. Yes sir.

Q. When you come to a crevice of that kind or a break of
406 that kind in the rock, what do you call that?

A. I should have to examine it considerably; if it is a large crevice and contains mineral-bearing matter I should call it a vein, an ore-bearing vein.

Q. We are getting ahead of the proposition. When you get to that kind of a break what do you call it; is it a joint still or do you call that a well-defined crevice?

A. There are extensive joints the majority of joints that run across mining claims have considerable distance.

Q. Is there any distinction between a joint and a crevice?

A. Yes sir, a joint is tight with very little or nothing between just like my hands; and a crevice implies an opening.

Q. Now isn't there other distinctions between a joint and a crevice?

A. A crevice may include some open joints, a crevice is much larger and it may be a more general break.

Q. The idea of a crevice embraces the idea of continuity, too, don't it, consistency and regularity; whereas these joints have no consistency or regularity; isn't that true?

A. To a certain extent, yes.

Q. When you come, then, to a break in the porphyry that extends for twenty or thirty feet regularly down, cutting through these joints without reference to their break or direction at all, and in some places opening so that there is a fissure, and filled in between; what do you call that? Is it a joint plane yet?

A. It may be, but the description you have given of its opening and having other material between the walls would make it a crevice.

Q. You have heard ever since you have been mining of our statute that speaks of a well-defined crevice, haven't you?

A. I have.

407 Q. When you come to that kind of a crack that has been described as contradistinguished from a joint, isn't it known the world over as a well-defined crevice?

A. Not in a legal sense; if I understand the term you allude to it is one which must include all kinds of veins.

Q. No sir, I have not spoken of a vein at all; I have not used the word vein; I am trying to find where you will distinguish between a crevice and a joint; a joint plane that is common to all porphyry and all rock where the first distinguishing element of a vein commences to distinguish the fissure from these common joint planes that exist everywhere; that is what I am trying to get at?

A. I will answer that question.

Q. Now you have laid down on your map here a crevice extending from here, from these timbers, to the bottom of the shaft, another one extending down parallel to it and still another one parallel to it; how far are those crevices apart?

A. They are not crevices; they are tight joint planes. The line marked D is ten feet distant from the line marked C, and the line marked C at the bottom of the shaft is about four feet distant from the line marked A. At the middle of the shaft the line marked C is about six feet distant from the line marked A.

Q. Do you say they are not crevices; what is a crevice?

A. Crevice is an opening.

Q. How far must it open before it becomes a crevice?

A. Very small amount.

Q. How far?

A. A quarter of an inch would be sufficient to make it a crevice.

Q. If there is a break in the rock that continues regularly
408 for 30 feet must the walls be absolutely separated from each other all of the way in order to make a crevice?

A. The majority of the way, at least.

Q. In your definitions then you go upon the principle of majorities, somewhat, do you?

A. My definition of a crevice?

Q. Yes?

A. It certainly must have an opening for most of the extent; occasionally the walls may come together and open a short distance above or below and it would still be a crevice at that particular point; it would be tight and would not be a crevice but still the whole thing might be termed one.

Q. What proportion of the distance does this first crack, I will adopt your expression, open up in the form of a crevice?

A. It is open near the top immediately under the timbers and I should think for half the distance down it becomes tight.

Q. Hence, as you found a majority, you don't call it a crevice, you call it a joint plane?

A. It is an opening near the top there.

Q. It is a crevice up there then?

A. Yes sir.

Q. And it comes together below; you studiously repudiate the idea that it is a crevice and correct me every time I call it a crevice?

A. I call it a joint plane, certainly.

Q. You have simply placed that on the same level as all of these irregular joints that you find in all rock, do you?

A. I do; it is more extensive, that particular one you are speaking of is more extensive than the majority of the joints.

Q. Isn't it so extensive that it distinguishes itself entirely from joint planes?

A. No sir it is exactly similar to the others.

Q. Isn't it a total misnomer to call it a joint plane?

A. No sir.

409 Q. Suppose that crack extends on down towards the center of the earth an indefinite distance and does not really become any larger than it is now in spots; it opens out in some places and then comes together, the walls; would it still be a joint plane?

A. Possessing the same character as shown in the Tecumseh shaft I could not possibly expect it to extend down any great distance.

Q. You couldn't?

A. No sir.

Q. What reason would you have for supposing it would stop?

A. It is so small; it certainly goes into the floor just as I have shown it on these sketches; it goes into the floor at the bottom of the shaft; it looks very small as you examine it, and its biggest opening, as I say where there is an opening, is near the upper portion right under the timbers, so that it shows a tendency to decrease to nothing down there.

Q. How much of an opening is there there?

A. I think there is about three inches.

Q. About three inches of a crevice?

A. Yes sir.

Q. How far does that continue?

A. For the first one or two of the horizontal joints, it lessens as it goes down.

Q. Doesn't it open out into a crevice again in places before you get to the bottom of the shaft?

A. No, it gradually gets down to nothing; the open crevice, as I recollect is for about four or five feet below the timbers.

Q. How far does it continue, do you say?

A. That diminishes to a tight joint about the middle or very nearly a tight joint about the middle of the shaft.

Q. How is it with reference to those other crevices?

A. You mean larger or smaller?

410 Q. No, with reference to being open in places and closed in other places?

A. The one marked B on those sections also shows some opening near the surface but is absolutely tight where it disappears in the west wall of the shaft.

Q. Doesn't that frequently occur with reference to veins in the mines of that hill, that the crevice closes up, the walls come close together for some distance?

A. Yes sir.

Q. That is a frequent occurrence?

A. They never come in absolute contact; they come close in some places, much closer than in others.

Q. Don't they come as close together as those walls do and continue so for some distance in the mines on that hill?

A. Occasionally I have seen them.

Q. And then open out again?

A. I have seen that occasionally, yes; but very seldom.

Q. Then why did you say that often occurs?

A. I say it seldom occurs.

Q. When that sometimes occurs and you know it has occurred on that very hill, why do you say that because these walls come together in places that you would expect that crevice to extinguish itself and not continue down into the ground?

A. I find nothing inside that crevice except material that has come from the surface; I find no evidence where it has opened sufficiently to show anything between the walls; I find nothing in there that has come from below like all true veins are formed; I find nothing but surface material.

Q. How do you know that vein matter comes from below?

A. It must necessarily; it cannot come from the air.

411 Q. May it not come from water?

A. Certainly; the majority of veins are deposited by water.

Q. Do you know whether that water has come from below or from above?

A. That is purely a matter of theory; some people hold not from the surface, but you are entering into the theory of vein formation.

Q. You say that you don't pronounce this a vein and you don't believe it is a permanent crevice because you don't see anything in it that came from below?

A. No sir.

Q. How do you know that anything that belongs in any of these veins came from below?

A. Because there is nowhere in the vicinity of the surface from which they could derive their values; all minerals come from below.

Q. Isn't it a matter upon which scientific men now substantially agree that this gold has been deposited in these veins by water—either hot or cold?

A. That is true.

Q. That the gold was in solution and has once existed in the form of water and that this water has percolated through these veins and left the gold and taken something else in place of it and carried it on?

A. There are two schools as to that; you describe perfectly what we know as the replacement theory, but there are a great many scientific men that do not believe that gold was ever deposited by replacement, but that it was deposited by impregnation.

Q. What would be the process of impregnation?

A. The process of impregnation would be water carrying in solution in the way you have described valuable metals percolating through a rock and in the interstices or various openings in

412 that rock depositing their values or depositing its value, the

water's value, there in the form of native metals, which are very rare; or, more frequently in the form of some metallic compound.

Q. That is merely another name for the same thing, isn't it?

A. No sir; that differs entirely from replacement; waters may be the same and carry the same metals in solution and the same chemical elements, but when they attack rock they remove, as you have described, the material matter of the rock and replace in the same spaces, precisely, the metallic ingredients.

Q. But both theories presuppose that the water carried the gold in solution?

A. Both theories, yes sir.

Q. But they do not agree how that gold got into the water or where the water came from, whether above or below, do they?

A. There are two different schools on that matter.

Q. What is the theory of the two different schools on that subject?

A. One believes that all the waters carrying these values came from some depth, not necessarily a very great depth, but from some depth upwards, following the course that hot waters naturally would especially under a very great heat; and others believe that the waters have spread out considerably through the adjacent country and derived their values from rocks not far removed from the seat of the deposit; those are called the lateral secretions.

Q. Which is the more prevailing theory?

A. The whole body of scientists are about equally divided between the two; I don't think that any one theory will account for all of the phenomena in any one large mining district.

Q. Then you are not justified in saying that you would
413 expect these crevices not to be permanent because you see nothing in their filling that came from below.

A. I think I am by my experience in Cripple Creek district.

Q. Then you would not pronounce any crevice in the Cripple Creek district a vein until you could satisfy yourself that the mineral came from below; is that true?

A. In a general way, yes; I would satisfy myself by an inspection of the vein material.

Q. By the vein material that it came from below?

A. Yes sir.

Q. You repudiate everything as a vein where the facts tend to show that it had been filled from above?

A. I should call those gashes, if I found mechanical materials brought in from the surface, I should certainly call that a gash and not a vein.

Q. You would call it a gash vein?

A. I would call it a gash, not a vein.

Q. Then you must satisfy yourself that a crevice has been filled from below before you would prenounce it a vein?

A. Yes sir.

Q. You take very radical ground, then, between those two schools as to where this comes from—from below or above?

A. I certainly believe with the ascensionists, as they are called.

Q. Isn't your opinion as to whether these crevices, as I call them, and joint as you cautiously call them, are veins, dependant, very largely, on what others have told you about what they carry?

A. If the samples which I assisted to take for analysis or for assay all returned values I would have to change my opinion.

Q. If Mr. Bruckman and Mr. Wynckoop would take you right into those crevices as I call them and point out material and tell you if you will knock that down and assay it it will run from one to four or five dollars, and point out that in several places
414 along these crevices, and you should take it with your own hands and deliver it to the assayer whom you had every confidence in and he should assay it and it should run in those values, what would you say those crevices were then?

A. If I am satisfied that that material that was pointed out to me as material that is in that crevice naturally of itself, and it all ran appreciable values, I would say that was evidence of a vein.

Q. What do you mean by, if it were there naturally?

A. I mean just what I say.

Q. You mean if it hadn't been salted?

A. Actual rock, yes.

Q. If you are satisfied then that the vein hadn't been salted and you took it with your own hands and had it assayed you would pronounce them veins?

A. I should say it was good evidence of a vein, yes.

Q. If you had to give an opinion as to whether it was or was not a vein, which way would you testify as to the fact under those circumstances?

A. I should state what I said, that it was good evidence of a vein.

Q. Would you say it was a vein or was not a vein or would you say whichever way you were hired on?

A. That has nothing to do with it.

Q. Would you say it was a vein or not a vein, one way or the other, in your opinion?

A. It depends upon the extent to which I found the mineralization there.

Q. Take the very case which I have supposed, what would you say?

A. If I found one spot that I could get an assay out of, or two spots now and then, it would not prove that it was a vein.

Q. I am not asking your opinion upon the hypothetical case stated.

415 A. I have said that it was good evidence of a vein.

Q. If you were asked what your opinion was as to whether it was or was not a vein, what would you say?

A. I should say a vein.

Q. You think that these crevices there were created by frost?

A. No, I didn't say so.

Q. I understood you to advance that theory yesterday?

A. That they were created in the Tecumseh shaft by frost?

Q. Yes sir?

A. No sir; I said that joints were frequently started by frost; I didn't apply that to these special crevices.

Q. I want to know whether we are on fire or cold here; one theory was that they were cooling joints; I understood you to express the opinion that they were frost joints?

A. No, I merely mentioned that joints are frequently started in that way, and cracks by the frost.

Q. Do you know of any cracks in solid formation extending down 38 feet that have been created by frost?

A. I could not say that I am positive how any of the joints were first started, but that is one of the frequent ways, and I don't know of any extending thirty feet or any other distance having been actually started by a frost, but I know that some are started that way.

Q. How deep is the wash there?

A. About eight or ten feet.

Q. Does it ever freeze below the wash?

A. That wash had probably frozen before the wash was there, before the accumulation on the surface.

Q. I understood you yesterday to say that this kind of crevices that kind of breaks just as you found them there in that discovery shaft are common to that hill, and that they may have been produced by frost; is that right?

416 A. That is right; they may have been produced by frost, yes sir.

Q. Nevertheless, if they are filled with mineral, if they had been made by frost and are regular crevices, well-defined crevices, and contained mineral in appreciable quantities, they might be located as veins, might they not?

A. Yes sir, they might be located as such.

Q. In other words, you don't have to prove before you locate a claim that the crevice was created in any particular manner, do you?

A. No, you do not.

Q. You don't go into the subject of heat or frost or anything else?

A. No sir.

Q. You spoke of the fact that veins, as they approach the surface become more perpendicular if they are dipping into the mountain?

A. Sometimes, yes; it depends upon the way in which they dip with reference to the general slope of the mountain.

Q. Is that true after reaching solid formation?

A. In the upper portion of it it is, yes sir.

Q. Isn't the fact just the reverse of that, that the dip of a vein is more likely to become greater from the horizontal after going down; that is to say, don't those veins straighten up as they reach depth, frequently?

A. Yes sir, they do, frequently, but it depends upon their relation to the mountain itself; if they dip into the mass of the mountain they are likely to flatten near the surface as they come near the sur-

face; if they dip out of the mountain, as the miners' expression is, or at an angle somewhat similar to the slope of the hill, then they will reverse; the upper portion will become straighter as it comes toward the surface, more nearly vertical.

Q. But this marked straightening as they reach near the
417 surface is generally above solid formation, rather than below, is it not?

A. It is in the rock in place but shattered rock in place, yes sir.

Q. I believe you stated you found a vein in shaft number 2 and shaft number 3?

A. Yes sir, shaft number 2; shaft number 3 I think was the one that was caved at the top and I could not get down.

Mr. THOMAS: Just the reverse?

A. Well, whatever the numbers were, I don't remember.

Q. Doesn't that vein that you described there in the Ophir shaft distinctly disappear in the wall of the shaft at a distance of 34 feet from the surface?

A. At a distance of 29 feet you can see it from the top, the last point that you can see it near the walls.

Q. 29 feet?

A. Yes, it runs up alongside the shaft quite a little piece, and the side of the shaft is broken out into it.

Q. Have you looked at it recently?

A. A few days ago, yes.

Q. At the former trial didn't the witnesses all describe it and didn't you describe it as going in the wall under a rock or a corner that had apparently been broken off as the shaft was sunk and reached the vein at the 34-foot point?

A. I don't remember the 34 feet; that drawing represents the exact thing correctly; I remember perfectly well in my direct examination also this: of my speaking of the breaking out into the wall of the shaft, an irregular breaking out into the wall of the shaft.

Q. Giving it the appearance of sort of diving under this broken corner?

A. Yes sir, that particular portion of the vein.

Q. Did you notice when you examined that recently that that corner had been shot off since the last trial?

A. No sir.

418 Q. Was it there just the same as it was?

A. To the best of my recollection there has been no change at all in the Ophir shaft.

Q. But you think you can find traces of the hanging wall up as high as 29 feet?

A. Yes sir.

Redirect examination:

Q. As a matter of fact, isn't the Ingham vein supposed to be a continuation of the Raven?

A. Yes sir.

Q. I believe you said that you prepared the plat for this work of Cross and Penrose?

A. The plat of the Independence vein and dike, yes.

Q. Did you in general assist in or give some assistance in the preparation of that report?

A. Some assistance and consultation with Cross and Penrose, yes.

Q. General Johnson read you particularly from the top of page 181 concerning the ore from the claims being derived from veins in one main zone of parallel fissuring; I will turn to page 180 and ask you whether or not the language which was read to you was not used in connection with the description of five different mines?

A. Yes sir.

Q. What are they?

A. The Raven, Princess, Gregory, Jack G and Ingham mines.

Q. You were asked by counsel whether you have not for many years among other things as a part of your business, examined mines with a view of testifying?

A. Yes sir.

Q. I will ask you to state whether or not your examinations are made conditional upon the results you reach being favorable to the parties employing you?

419 A. Yes sir, I always insist upon the right to make a preliminary examination before being engaged as a witness.

Q. Are there any instances in which you examinations have resulted unfavorably so that you were not able to testify for the parties?

A. Several; there was one about three or four months ago.

Q. What was that one?

A. That was in the case of Cone and Robison I think against the Ingham Mining Company.

Q. That is to say these identical parties who are defendants in another matter?

A. Yes sir.

Q. And other instances you say, also?

A. Yes sir, in Ten Mile, Aspen and Leadville.

Q. You were asked generally about the theories of scientific men concerning the manner in which precious metals are deposited in the rocks in this and other camps; is there anything in that Tecumseh shaft showing the deposit or the existence of gold-bearing rock from water coming from below or coming from above, or coming from any other direction?

A. There is nothing except mud in the cracks which is carried from the surface that might take down a little gold mechanically from the surface.

Q. You were asked whether you were pointed out mineral that would assay and should select your own assayer and your own material and the result of the assays should show the existence of metals in appreciable quantities if you should call it a vein; let me ask you whether if you should be shown ten or eleven different places from which material was taken and from which you got but

one or two assays and that from one point, the others giving nothing or a trace, how would it be?

A. No sir.

420 Q. If you were shown a shaft 38 feet in depth and within a distance of from 16 feet above to 24 feet below you should take 16 assays of which six would show appreciable quantities there being nothing in the balance of the shaft, would you call that a vein?

A. No sir.

Q. Isn't that the same map, the same section map that was used at the last trial?

A. Precisely the same.

Q. Has it been in any manner changed?

A. No sir.

Q. It is then in the same condition now that it was at the time we tried this case before?

A. Yes, sir; just the same.

JAMES A. DOYLE, being first duly sworn on behalf of the defendants, testified as follows:

Q. Mr. Doyle, where do you live?

A. Anaconda.

Q. How long have you been a resident of this county?

A. About 6 years and a half.

Q. What is your business?

A. Assaying.

Q. How long have you followed the business of assaying?

A. Thirteen years.

Q. Since you have been in this county has that been your business?

A. Yes sir.

Q. Have you during that time been the assayer for any particular mines or mining companies?

A. Yes sir.

Q. What ones?

A. I have been for the Elkton, Raven, Victor, Anaconda and several others, I don't remember now, and the Prince Albert.

Q. In addition to that have you been engaged in assaying

421 as a general business?

A. Yes sir.

Q. Are you acquainted with the property in controversy here?

A. Yes sir.

Q. How long have you known it?

A. About a year or so.

Q. How often have you seen the property; about how often?

A. About four or five times.

Q. When you first went to the ground by whom were you accompanied?

A. Mr. Lee.

Q. Anybody else?

A. Yes sir, Mr. Cone, Mr. Boehmer and Mr. Dahl.

Q. Did you assist or take or have taken in your presence any material from any of the workings in controversy here for the purpose of assaying?

A. Yes sir.

Q. From what shafts?

A. From the Tecumseh.

Q. The Tecumseh number 2?

A. I don't know.

Q. I mean the Tecumseh working shaft.

A. The discovery shaft, yes sir.

Q. I will ask if you remember making an assay for Mr. Cone of any rock some time in the month of October 1893.

A. Yes sir.

Q. When did he bring you that rock, about what time?

A. He must have brought it that day or the day before.

Q. Did you make an assay of it?

A. Yes sir.

Q. And gave him the return?

A. Yes sir.

Q. What was the result of that assay?

A. I don't remember.

Q. You remember of testifying about it at the other trial?

A. Yes sir.

Q. You can get that for me, please?

A. Yes sir.

Q. Going to the Tecumseh discovery shaft I will ask you when any samples were first taken from that shaft, if you remember.

A. On the 19th of May, 1897.

422 Q. About how many samples were taken at that time?

A. Four.

Q. Can you state where they were taken from?

A. Yes sir.

Q. Where?

A. Sample of streak east end of cross-cut; number 2 was sample of streak east end of shaft; number three was streak northwest end of shaft.

Q. That would be in through here?

A. Yes sir.

Q. From what material, if any, did you take it?

A. I can't remember the material, a kind of porphyry.

Q. Were there any streaks or seams or crevices or fissures that you aimed to take it from?

A. Yes sir, there is a streak.

Q. Who was with you at the time?

A. Mr. Moore, Mr. Boehmer and Mr. Burdett.

Q. Anybody else?

A. No one else down in the shaft.

Q. Who broke the samples?

A. Mr. Dahl broke some and Mr. Boehmer and Mr. Moore I think broke some.

Q. You and Mr. Dahl and Mr. Burdett and Mr. Moore were in the shaft?
A. Yes sir, and Mr. Boehmer.
Q. How were the samples taken; how were they preserved after they were broken?
A. They were put in sacks, tied and put in my pockets.
Q. What kind of sacks?
A. Clean, new canvas sacks.
Q. Were those placed by you or by some else in the sacks?
A. We placed them in the sacks.
Q. Who do you mean by we?
A. Mr. Burdett and I each one took our own samples.
Q. Was there anything placed in the sacks or in the samples that you didn't place there?
A. No sir.
Q. And that was taken from the wall and made a part of
423 the samples?
A. Yes sir.
Q. How much material would be taken at those times?
A. We would take from a half of a pound to a pound, I should judge.
Q. Did Mr. Burdett take any part of the samples?
A. No, they broke separate samples at that time.
Q. There was only one sample?
A. Only one sample; we broke it up and took half and half.
Q. They were divided between you two assayers?
A. Yes sir.
Q. What amount of space would be covered by the picking of the samples, breaking them down?
A. It would cover just as far as we could; we took right across wherever we could get.
Q. You mean up and down the streaks or the seams?
A. Yes sir.
Q. What did you do with them after you picked them?
A. We put them in my pockets, came on top, took them down to the office and assayed them.
Q. How did you assay them, if you did assay them?
A. By the crucible method.
Q. Did you test the ingredients or fluxes that you used?
A. Yes sir.
Q. I will ask you that general question with reference to all of the assays that you have taken from time to time in these workings?
A. Yes sir.
Q. In each instance you tested them?
A. Yes sir.
Q. And found them chemically pure?
A. Yes sir.
Q. Now did you afterwards take another line of samples from this shaft?
A. Yes, from the Tecumseh.

Q. About what time was that—was it before the last trial?
A. Yes, May 31st.
Q. How many did you take?
A. I took nine.
424 Q. Who was with you when they were taken?
A. I think it was Mr. Moore, Mr. Dahl and I forget the others.
Q. Were they broken in the same way?
A. Yes sir.
Q. What part of the shaft were you in when you took these samples?
A. We started sampling down; we started at fifteen feet below the collar and then went on down every five feet.
Q. In taking the samples at that time did you pick down these streaks or cracks, what was claimed to be the vein there?
A. We took across and down wherever we could get.
Q. You took how many samples in all?
A. We took nine.
Q. At arbitrary distances of five feet below the fifteen-foot point?
A. Yes, down to sample number seven, and then eight was abreast of east drift and number nine was south of east drift, sampled all along the wall.
Q. Who did you say were with you when you took these?
A. I think Mr. Dahl and Mr. Moore. I am no sure who else.
Q. Was Mr. Burdett?
A. Yes, Mr. Burdett was there.
Q. Were those samples taken in the same way, so far as breaking and catching them in a sack was concerned?
A. Yes sir.
Q. And divided between you and Mr. Burdett?
A. Yes sir.
Q. And assayed in the same way?
A. Yes sir.
Q. Give the result of those two lines of assays thus taken.
A. All traces.
Q. What do you mean by that?
A. You can't weigh it; it was less than thirty or forty cents a ton.
Q. Have you since then taken another line of samples for assay from the Tecumseh shaft?
A. Yes sir.
Q. When?
A. On June 14th, I think; I first went there June 11, was
425 the first trip.
Q. And from then on how many days?
A. I worked there June 11, 12th, 14th and 15th.
Q. Who was with you?
A. Mr. Burdett.
Q. During the four or five days you were engaged in taking samples?
A. Yes sir.

Q. Did anybody go with you besides Mr. Burdett?
A. No sir.
Q. Did anybody go there with you to designate the places by number or by letter or anything of that sort?
A. Mr. Moore, I telephoned him asking him if he would go and show us the streaks how to designate the streaks; that was all we wanted.
Q. What letters did he give you for the vertical streaks?
A. He gave us letters A, B, C, and D and two C's and two D's, etc.
Q. As shown on this plat?
A. Yes sir, the same letters.
Q. How many samples in all did you and Mr. Burdett take from that shaft for assay?
A. 182.
Q. Please describe the distances at which they were taken?
A. They were taken every foot.
Q. Did you sample the streaks or seams separately?
A. Yes sir.
Q. From what point in the shaft near the collar did you begin?
A. We put a tape right on top even with the collar of the shaft and started right under the timbers, and sampled right down.
Q. Each of those streaks?
A. Yes sir, each of those streaks.
Q. Did you make a list of them?
A. Yes sir.
Q. At the time?
A. At the time I was taking them, yes sir.
Q. How did you divide them commencing with streak A; how many were taken from streak A?
A. From streak A, 16.
Q. Have you a typewritten copy of it?
A. Yes sir.
426 Q. You took 16 from streak A; that is the top one on page one; are you sure of that?
A. Yes, I think so; I didn't mark that first streak; I didn't know what that first streak was.
Q. How have you taken them commencing at the southwest corner of the shaft and read them off as fast as you can?
A. No. 1 southwest corner of shaft ten feet below collar; No. 2 west side of shaft 10 feet below collar; No. 3 west side of shaft 11 feet below collar; No. 4 west side of shaft 12 feet from collar; 5 west side of shaft 13 feet from collar; 6 west side of shaft 14 feet from collar; 7 west side of shaft 15 feet from collar; 8 west side of shaft 16 feet from collar; 9 west side of shaft 17 feet from collar; 10 west side of shaft 18 feet from collar; 11 west side of shaft 19 feet from collar; 12 west side of shaft 20 feet from collar; 13 west side of shaft 20½ feet from collar; 14 west side of shaft 21 feet from collar; 15 west side of shaft 22 feet from collar; 16 west side of shaft 23 feet from collar.
Q. Where did you begin on streak B?
A. Streak B north end of shaft; No. 17, 10 feet from collar; No.

18, 11 feet from collar; No. 19, 12; No. 20, 13; 21, 14; 22, 15; 23, 16; 24, 17; 25, 18; 26, 19; 27, 20; 28, 21; 29, 22; 30, 23; 31, 24; and 32, 25 feet from collar.

Q. Going back to streak A at the southwest end of the shaft, just give what you took from that?

A. No. 33, 10 feet; 34, 11; 35, 12; 36, 13; 37, 14; 38, 15; 39, 16; 40, 17; 41, 18 feet; 42, 19; 43, 20; 44, 21; 45, 22; 46, 25; 47, 24; 48, 25; 49, 26; 50, 27; 51, 28; 52, 29; 53, 30; 54, 31 feet; 55, 32, 56, 33; 57, 34; 58, 35; 59, 36; 60, 37 feet.

Q. Those were taken from streak A?

A. Southwest end of shaft.

Q. At intervals of one foot each?

A. Yes sir.

427 Q. Did you sample the same streak at the northeast end of the shaft?

A. Yes sir.

Q. Read that?

A. No. 61, 10 feet from collar; 62, 11; 63, 12; 64, 13; 65, 14; 66, 15; 67, 16; 68, 17; 69, 18; 70, 19; 71, 20; 72, 21; 73, 22; 74, 23; 75, 24; 76, 25; 77, 26; 78, 27; 79, 28; 80, 29; 81, 30; 82, 31; 83, 32; 84, 33; 85, 34; 86, 35; 87, 36.

Q. Those were also from streak A?

A. Yes sir.

Q. Now then where was the next series taken from?

A. That was from streak C?

Q. Proceed and give the number you took from the southwest end of the shaft?

A. 88, 24; 89, 25; 90, 26; 91, 27; 92, 28; 93, 29; 94, 30; 95, 31; 96, 32; 97, 33; 98, 34; 99, 35; 100, 36; 101, 37.

Q. Why does that begin at 24 feet from the top instead of ten feet?

A. That is where the streak starts.

Q. Did you sample the other side, or end of the shaft where this streak is?

A. Yes, sir.

Q. Give the numbers and distances taken.

A. 102, 22; 103, 23; 104, 24; 105, 25; 106, 26; 107, 27; 108, 28; 109, 29; 110, 30; 111, 31; 112, 32; 113, 33; 114, 34; 115, 35; 116, 36; 117, 37.

Q. From what part of the shaft did you take your next samples?

A. Streak D.

Q. What would be where?

A. That would be the north corner of east drift.

Q. Go on and give the number that you took from streak D in the north corner?

A. 118 northeast top of drift, 119 a foot and a half lower, 120,

428 a foot and a half lower, 121, a foot and a half lower than the preceding numbers.

Q. Take the same streak or seam on the south side of the shaft?

A. In the breast east from the south side; 122, top of drift; 123 a foot and a half lower; 124, a foot and a half lower; 125, a foot and a half lower.

Q. Where next did you take samples?
A. Horizontal slips.
Q. Which ones?
A. 18 feet 9 inches from collar of shaft taken from the southeast corner of shaft, samples all the way round.
Q. How many did you take from that?
A. 126 southeast corner; 127 a foot and a half northerly; 128 a foot and a half northerly; 129, a foot and a half northerly; 130, a foot and a half westerly; 131 a foot and a half westerly; 132 a foot and a half southerly; 133 a foot and a half southerly; 134 a foot and a half southerly; 135 a foot and a half southerly; 136 a foot and a half east; 137 a foot and a half east.
Q. That would be round the shaft?
A. Yes sir, 18 inches apart.
Q. Where next did you take any?
A. On the horizontal streak 22 feet from collar beginning at the northeast corner of the shaft; I took the samples 18 inches apart, 138, 139, 140 and 141.
Q. Does that streak appear on both sides of the shaft or on one side only?
A. I didn't make any marks of that.
Q. You took only from one?
A. It only appears on one side of the shaft, the four samples.
Q. Where next did you take any samples for assay?
A. Horizontal streak 11 feet two inches from collar of shaft.
Q. That would be somewhere under the timbers?
A. Yes, sir, right under the timbers.
Q. Go on.
A. Beginning in the south corner 142 north a foot and a
429 half; 143, 144, and 145; west 146 and 147; south 148 and 149; 150 and 151; east 152 and 153.
Q. Why did you take more on the south and north than you did on the east and west?
A. On account of the shaft.
Q. The shaft is longer one way than the other?
A. Yes sir.
Q. Where next did you take any samples?
A. Horizontal slip beginning in the northeast corner of shaft, 35 feet from collar.
Q. That would be this one?
A. Yes sir.
Q. Go on?
A. 154 west a foot and a half, and 155; 156 south, 157 south; 158 south, 159 south; 160 roof of east drift, 161 east drift a foot and a half south, 162, 163, 164, 165, 166, that is in the drift.
Q. Where next did you take any?
A. Horizontal breast of east drift; 167 northerly; 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178.
Q. Those were taken at what intervals apart?
A. Foot and a half.
Q. Did you take any others?

A. Yes sir, I took laminated slips.

Q. Is that those slips which appeared close together in the side of the drift?

A. Yes, four of them; 179, nearest breast of east drift; 180 north of 179; 181 north of 180; 182 north of 181.

Q. In taking those samples what sort of material did you attempt to take for the purpose of assaying?

A. I got just as fair as I could get and the best that it looked to me.

Q. Wherever anything appeared that gave any sort of evidence of containing precious metals you took it?

A. Yes sir.

Q. Those samples then cover do they not a distance of a foot apart up and down that shaft?

A. Yes sir.

430 Q. And a foot and a half apart on the horizontal slips running around the shaft?

A. Yes sir.

Q. The other lines that you took prior to the first trial, if I understand you rightly, consist of taking them at arbitrary intervals, and of taking the wall between the vein?

A. Yes sir.

Q. What was done with the samples constituting the last or long line which you took?

A. As fast as we would take them we would sack them and tie them—new sacks—and seal them with sealing wax.

Q. Did you mark them?

A. Marked them, yes.

Q. Then what did you do with them?

A. We had a sack down there and kept them until we got through with the day's work, took them down to the office and put them in a safe.

Q. Did any one have access to those samples, and when I say those samples I mean the three lists besides yourself and Mr. Burdett, from the time they reached your hands until they were assayed?

A. No sir.

Q. They were all fire assays?

A. Yes sir.

Q. How much time did you spend in making the assays of this last list of 182 samples?

A. I think it was a little over a week.

Q. Did you make duplicate assays?

A. Yes sir.

Q. What was the result of the assays of the 182 samples that you took?

A. All a trace.

Q. That remark applies to each and every one of them does it?

A. Yes sir.

Q. Is it or not a fact that the country rock in the neighborhood when assayed will also give what the assayers call a trace?

A. Yes sir.

431 Q. Have you done any practical mining during the 13 or 14 years that you have been an assayer?
A. Not much; I have leased a good deal.
Q. Have you during that time examined any mines?
A. I have sampled quite a few.
Q. And familiarized yourself in that way with vein formations?
A. Yes sir, I know a vein when I see it.
Q. State whether or not there is a vein, lode or ledge in the discovery shaft of the Tecumseh claim?
A. No sir.
Q. In addition to the assays and samples that you have testified to state whether you took or helped to take any lines or samples from the Ophir discovery shaft?
A. Yes sir.
Q. When did you take those?
A. The first was the 17th of May.
Q. By whom were you accompanied then?
A. By Mr. Lee.
Q. You mean Mr. H. H. Lee?
A. Mr. H. H. Lee; I think Mr. Boehmer and Mr. Dahl—there were quite a few up there, I don't remember them all.
Q. How was that line of samples taken? You began where and ended where?
A. I only took two on the 17th; Mr. Dahl didn't have any timbers in there so we could stand, so we stood on stulls and ladders.
Q. Where were those taken from?
A. Number 1 was taken 26 feet from the collar of the shaft; number 2 22 feet from the collar of the shaft.
Q. Upon what side or end of the shaft?
A. It was on the east.
Q. When did you next take any samples from that shaft?
A. May 19th.
Q. How many were taken then?
A. 10.
Q. By whom were you accompanied there?
432 A. Mr. Moore, Mr. Boehmer, Mr. Burdett and Mr. Dahl.
Q. How were those samples taken?
A. They were taken the same as the others but we had a platform in there so as we could get at it.
Q. Who broke them?
A. Mr. Dahl broke them.
Q. Did you begin at the top and work down or at the bottom and go up?
A. We commenced at the bottom and worked up.
Q. How were the samples collected, in bags?
A. Mr. Dahl would break it and we would take each one a sample; first I took it and put it in the sacks, new sacks.
Q. You took it directly and put it in the sacks yourself?
A. Yes sir.
Q. Was there any material placed in the sacks except that which was actually broken from the sides of the shaft?

A. No sir, I don't think so.

Q. What did you do with the samples after they were thus taken; how did you number them?

A. We started to number them just with successive numbers until we got through.

Q. What sort of sacks did you use?

A. Canvas sacks.

Q. New canvas sacks?

—. ——.

Q. Where did you take them after they were gathered?

A. I took them to the office.

Q. Did you take them yourself to the office?

A. Yes sir.

Q. Did anybody have access to them?

A. No sir.

Q. From the time they were broken and put into the sacks until they were assayed, except yourself?

A. No sir.

Q. I forgot whether you said they were numbered from one upwards?

A. Yes sir.

Q. Numbered from the top of the shaft downwards?

A. No, number one is the top of drift.

433 Q. Just at the bottom of the shaft?

A. At the bottom of the shaft.

Q. Then from there upwards they are given?

A. Yes sir.

Q. Did you assay them in the same manner that you did the others?

A. Yes sir.

Q. Give the result to the jury?

A. Do you want the descriptions also?

Q. Yes?

A. Number one top of drift south end of shaft $15.20; number 2 twelve feet south of shaft $27.20; number 3 eight feet north of shaft $30.00; number 4, forty-two feet north of shaft $4.80; number 5 thirty-five feet below collar of shaft east side $136.80; number 6 30 feet below collar of shaft east side $4.00; number 7 25 feet below collar of shaft east side, $4.60; number 8 from 21 to 22 feet below collar of shaft east side, $7.80.

Q. Did you take or assist in taking any other line of samples from the Ophir shaft?

A. Yes sir.

Q. When?

A. I think it was on the 27th of May.

Q. Of the same year?

A. Yes sir.

Q. Who was present when those were taken?

A. I think Mr. Moore, Mr. Burdett, Mr. Dahl and I think Mr. Boehmer.

Q. How were they broken?

A. In just the same way as the other line, except we started at the top and went down.

Q. The samples were taken in the same way and put in bags the same way?

A. Yes sir, Mr. Dahl broke them.

Q. Numbered and identified and taken to the office?

A. Yes sir.

Q. Did anybody have access to those samples constituting the last list, except yourself, from the time they were broken until they were assayed?

A. No sir.

Q. Was anything placed in the bags except the samples broken from the walls?

434 A. No sir, I don't think so.

Q. Did you make an assay of those?

A. Yes sir.

Q. How were they numbered—from the top downwards or from the bottom upwards?

A. Numbered from the top downward.

Q. How many of them were they?

A. 12.

Q. Commencing at what point in the shaft?

A. 22 feet below the collar of the shaft.

Q. Were duplicates of those samples taken by Mr. Burdett, also?

Q. Yes sir.

Q. Was there any difference in the manner in which the uppermost sample was broken for yourself and that which was broken for Mr. Burdett?

A. Yes, I think there was.

Q. What was it?

A. There was sampling right straight down for me, and giving him more of a general sample.

Q. At that point or generally?

A. At one point.

Q. What point was that?

A. That was 21 feet below the collar of the shaft.

Q. Beginning with your number one on your list, give the jury the results?

A. Number one 22 feet below collar of shaft, $16.20; number 2, 25 feet from collar of shaft, $19.20; number 3, 30 feet from collar of shaft, $27.40; number 4, 35 feet below collar of shaft, $34.40; number 5 forty feet $20.40; number 6, 45 feet, $17.60; number 7, 50 feet, $24.60; number 8, 55 feet, $31.80; number 9, 60 feet, $19.20; number 10, 12 feet south of drift $26.40; number 11 8 feet north of shaft, $223.60; number 12, 42 feet north of shaft, $5.00.

Q. State whether or not there is a vein in the Ophir discovery shaft?

A. Yes sir.

435 Q. Is there or not a vein continuous and well defined from the point where your first ore was taken close to the collar of the shaft, downward?

A. Yes sir, I should call it well defined.

Q. Why do you say you would call it a vein?

A. It is so much harder than the surrounding rock, and it has got values in gold, and assays.

Q. Those assays were properly taken and are correct, are they?

A. Yes, sir.

Q. From rock you assisted in breaking yourself?

A. Yes sir.

Q. Or taking?

A. Yes.

Q. What do you understand to be meant by the term vein?

A. A body of mineralized matter in the mass of the mountain.

Q. Did you keep the pulps of these different samples that you have testified to?

A. Yes sir.

Q. What became of them?

A. I have got all but the last 182 and Mr. Bruckman threw those out.

Q. Mr. Fred Bruckman?

A. Yes sir.

Q. The gentleman who testified here?

A. Yes sir.

Q. When was that?

A. After he took possession of the office.

Q. You sold out to him?

A. Yes sir, I had these pulps all sealed in a box.

Q. What you mean to say is that he destroyed them without any intention?

A. Yes sir.

Q. That is the way you account for their disappearance?

A. Yes, sir; I suppose he thought they were just specimens.

Q. When can you get the return of the assay sample that you made for Mr. Cone some time in 1893?

A. I could not get it today.

Q. You can get it for me by Monday?

A. Yes sir.

436 Q. Mr. Doyle have you examined your former testimony as to the assays that you made in September or October 1892?

A. Yes sir.

Q. Could you now state what the result of that assay was?

A. Yes sir. $4.20 a ton.

Q. The first line of samples which you have testified to as having been taken in June from the Tecumseh shaft you speak of as streak A?

A. Streak B I should have said; I noticed it on my book afterwards; there are two streak B's.

Q. Did you mean there was one streak on each side of the shaft of the same letter?

A. Yes sir.

Q. You took those first?

A. Yes sir.

Cross-examined by General JOHNSON:

Q. How long have you been an assayer?
A. About 13 years.
Q. Where?
A. Pueblo, Gunnison, Montana and Utah. I learned at the Pueblo smelter.
Q. How long have you been assaying in the Cripple Creek district?
A. Six years and over.
Q. How long have you been doing assaying for Cone and Robison?
A. It has been pretty near two years, I should judge, since I have done any assaying outside of this.
Q. How long since you did the first assaying for them?
A. About 1892, I should judge.
Q. To what extent did you do their assaying from that time on?
A. I did all of it for a long time and Mr. Dahl had charge of the Chief and those properties, prospects at that time; I guess I did it all, I don't know how many, not much; the bill never amounted to very much until they struck the Doctor.
437 Q. You substantially did all they had to be done for several years?
A. So far as I know; I don't know whether they took any to any other place or not.
Q. As I understand you you took samples for assaying from the Tecumseh discovery shaft on three different occasions?
A. Yes sir.
Q. Twice prior to the former trial and once since?
A. Yes sir.
Q. How many samples did you assay on the first occason?
A. Four.
Q. How many on the second?
A. I think it was nine.
Q. And 182 on the third?
A. Yes sir.
Q. And I believe you stated all those assays ran a trace?
A. Yes sir.
Q. What, in your assaying do you call a trace?
A. It is a small particle of gold which it visible to the eye but you cannot handle it to weigh it; and, another thing, if you have an assay and it don't go over forty or fifty cents I call it a trace. I might have taken enough assays, ten or twelve assay tons, what would represent ten or twelve tons of ore; that would probably give a weight and it might be forty cents; I might do that.
Q. Did you find a trace of gold in either of these?
A. I called them a trace; there was a little speck in there that might have been a little spot of dirt for all I know; I am positive that if I had put them all together they would not have weighed a dollar for the whole 182; it would not represent a dollar a ton.
Q. It would not represent a dollar a ton?

A. No sir, I don't think the whole 182 samples would, taking them all and putting them right together; you will remember if you take one assay ton and try to weigh it it is so small you
438 are liable to lose one of that 182.

Q. What is an assay ton?

A. An assay ton represents two thousand pounds of ore; it is a little less than a troy ounce.

Q. In making these assays what process did you use?

A. I used the crucible process, fire; I used different ingredients, put them in the fire and heated them.

Q. You used what is known as the scorification process?

A. No, sir, the crucible.

Q. They are both fire, are they not?

A. Yes; in the scorification you can only take just one-tenth the amount that you could in the crucible, and besides that your assay wouldn't amount to much on that low-grade ore; the more ore you take the better your results would be if there is any gold you would be sure to get it and the more you take the bigger the weight.

Q. You take for crucible assaying how much ore?

A. I take a half assay ton; that would represent one thousand pounds of ore, and take two of those, one to check the other.

Q. How much ore would a half assay ton be?

A. It would be a little less than half an ounce troy; practically a half ounce.

Q. State whether or not in all of those samples that you assayed it was composed of one piece of rock or more.

A. You mean in sampling the shaft?

Q. Yes.

A. I had more than one piece of rock.

Q. About how many?

A. I don't know; we just knocked it down; there would be a lot of fine and coarse, as near an average as — could get; one piece of rock is no assay; it would not represent anything.

Q. Would all of those pieces that went into the bag be
439 from the same place?

A. In the vicinity as near as we could get it; it would not be from the identical place, but in taking the sample you would probably have to get it wherever you could get it, on the crevice or crack or seam.

Q. About how many pieces would you generally put into one sack?

A. I don't know how many pieces it would take to make from a half to three-quarters of a pound sample; it depends on the specific gravity of the rocks.

Q. About how much would each one of those samples weigh?

A. I think they would average from a half pound to a pound, right through.

Q. Then how much of that sample would you crush?

A. I would crush the whole thing, every bit of it.

Q. Then to make your assay you would take approximately about a half ounce?

A. No, I would take an ounce; I would run a check on it and run them both together; dissolve them together but run them separate so that it would be about an ounce approximately.

Q. About an ounce of ore to make up the duplicate assay?

A. Yes sir.

Q. What would you do with these duplicate results?

A. I would just run them right along and dissolve them together and weigh them if I could.

Q. Would you dissolve them together or separately?

A. Together.

Q. The result of an assay of that kind depends a great deal upon how you handle your materials, does it not?

A. Yes sir, everything depends on that.

Q. If your furnace is too hot then the gold is liable to be
440 dissipated isn't it?

A. No sir, not in the silicious ore in the Cripple Creek district; that is what the assayers are all kicking about up there; you have got to have a hot furnace.

Q. There is no such thing as its being too hot?

A. It might get so but if you get a good fluid composition the ore has got to pour freely, the fluid slag.

Q. Doesn't the mere fact that all of these assays run a trace of gold indicate that that shaft is in a mineralized zone?

A. It might be in a mineralized zone, yes.

Q. I understood you to say that you might get a trace from most any kind of country rock?

A. I picked up a piece in the Dolly Varden mine that went 30 ounces in gold—a piece of float.

Q. That came from the vein, evidently?

A. It evidently did.

Q. From the apex of the vein?

A. It might.

Q. That is one of the ways miners have of discovering a vein?

A. Yes sir.

Q. But you don't mean to say that all of this rock will assay a trace?

A. A good deal around on some of the hills and on other hills it won't; you can get country rock up above the Victor mine, one of the richest mines in the camp, and you can't get a trace out of it.

Q. I am not inquiring whether you can find it, I am asking you to state whether or not the great mass of the country rock—the porphyry—entirely away from veins or crevices will run a trace in gold?

A. I don't know.

Q. Don't you know it won't?

A. It might.

Q. Does it?

A. I don't know, for the simple reason that oftentimes samples——

441 Q. You don't say it don't?

A. No, I don't say it don't for the simple reason that there is oftentimes stuff like that brought in——

Q. You don't know whether the whole surface of the face of the earth runs a trace of gold or not?

A. No sir; I do not; what I know is what I have seen myself from the assays I make.

Q. Do you say you have not assayed enough to have an opinion on that subject?

A. Possibly I would and possibly not, I don't know.

Q. Who used the pick in taking these samples—those samples from the Tecumseh shaft?

A. I picked a part of them for a while and then Mr. Burdett would pick; we would change off.

Q. You also took some samples from the Ophir lode?

A. Yes sir.

Q. Were you present when these samples were taken by Mr. Moore?

A. I am sure I don't know. Mr. Dahl was picking all the time I was there and we were holding the sacks and following him, taking the samples and Mr. Moore was off in other places.

Q. Who did the picking when you took these samples from the Ophir shaft?

A. Mr. Dahl.

Q. All of it, didn't he?

A. Yes sir, I think he did it all.

Q. You sampled that Ophir shaft from about 21 feet down?

A. Yes, between 21 and 22 feet down.

Q. Down to 70 feet and through the drift?

A. I went down there you know the shaft is about 70 feet deep; I think it was down to there.

Q. You started up on one occasion — started down on the other, did you not?

A. Yes sir.

Q. I believe you gave an account of some three samples at the time you commenced sampling down the shaft above thirty feet?

442 A. Yes sir, that would be number one, two and three.

Q. How long were you engaged in picking these 182 samples?

Q. About four or five days; I have got it here—four days.

Q. Did you assay any of them before you had them all taken?

A. No sir.

Q. Then you had 182 sacks?

A. Yes sir.

Q. Where did you keep those sacks?

A. I had them in a safe for quite a while; the safe belonged to the Golden Cycle Company and they came and got the safe and I put them in a big box and put them under the table and they were all sealed, every one of them, as fast as we took them from the mine.

Q. Isn't it a fact that a shaft of that kind the result of assays may depend entirely upon whether the person looking for ore wants to get ore that will assay or not?

A. Yes, if a person wanted to do that.

Q. You might take a piece of ore and know that it would not assay higher than a trace, and at the same time you might take a piece of ore three inches from it that you would know would assay?

A. I didn't do anything like that.

Q. I am not asking you whether you did; isn't it true that it might be so?

A. Yes.

Q. So that if a person taking ore didn't want to find something that might assay he could very easily avoid it, mightn't he?

A. Yes, certainly.

Q. And in that view it would make no difference how many assays he took; he might take five hundred or a thousand and not get more than a trace?

A. Looking at it from that point of view, yes.

Q. If he didn't want to?

A. Yes sir.

443 Q. Have you ever said to any one that you could show them ore in that shaft that would assay?

A. No sir; you asked me that at the last trial and I told you that I had not.

Q. Don't you think that you could do it?

A. No sir, I don't believe I could; I have sampled it enough; if there was any there I ought to have found it.

Q. These assays you took from the Ophir shaft above the 34-foot point were broken down by Mr. Dahl, were they not?

A. Yes, he stood on the ladder and stull and broke them and we would catch them and put them right in the sack.

Q. Did you catch them all?

A. Mr. Burdett caught some.

Q. Didn't he handle them?

A. Who?

A. Dahl.

A. With one pick in his hand he was not in a place where he could handle them very much; he handled them and handed them to us; we were as close to him as we could get; we were right on the stull where he was.

Q. He stood up and broke them off and laid them in the other hand?

A. Yes, and handed them to me.

Q. Used the pick with one hand and the other to take the pieces off of the sides?

A. Yes sir.

Q. You were not watching him at all to see whether he tampered with those samples or not were you?

A. I was right there by him; I don't see how he could; he was in a position where he couldn't do it, with one foot on the ladder and the other one on a stull I don't see how he could do anything.

Q. You were not watching him to detect him if he should do such a thing; you didn't think of it at the time?

444 A. I never had any idea that he would do anything like that; I was not watching him for that purpose; I had no idea of it.

Q. You made an assay at 25 feet down that ran $4.60?

A. 25 feet $19.20; I have the date on the 27th; is that the date you refer to?

Q. It is the last time you were there?

A. That would be May 27th; 25 feet I think I reported $19.20.

Q. At 22 feet you got number one that ran $16.20?

A. Yes sir.

Q. Number 3 at 30 feet that ran $27.40?

A. Yes sir.

Q. That would be all pay ore, wouldn't it?

A. I should say so if the vein was big enough it would be; it would make good mill ore, anyhow.

Q. You never heard of any one milling any of it, did you?

A. I don't know; I was not there except at the time I went to sample it; I don't know anything about that shaft.

Q. These samples came right out of the southeast corner, did they not?

A. Yes sir.

Q. Right opposite the point where the vein discovered down at 34 feet would come up?

A. Just about, I guess; I am not sure; I never made any particular examination of the vein other than sampling.

Q. You saw the vein where it crossed the shaft?

A. Yes sir.

Q. And goes into the wall?

A. Yes sir.

Q. 34 feet down?

A. Yes sir.

Q. Did you measure it down to that point?

A. No sir, I didn't measure it at all.

Q. Can't you easily trace it with the naked eye right into the side of the shaft there at the 34-foot point?

445 A. I didn't trace it, no; my eyesight isn't very good anyhow down in the shaft.

Q. Is it good enough to see that vein?

A. It is right close up where you have some one to show it to you.

Q. Is it something the color of that?

A. I couldn't tell you; I haven't been there since last June.

Q. And you can't remember how it looked then?

A. I know it was kind of reddish hard quartz, iron stained.

Q. You took these samples right from the corner where that vein if projected from the point you can see it would occur if you would go in far enough?

A. Yes, I guess so.

Q. You didn't bring any rock from there to let us see?

A. I didn't bring any rock of any kind.

Q. You didn't see any such rock there as this?

A. I couldn't tell you; I haven't been there since last June and I have seen a great many kinds of rock since then.

Q. When you were there these three times you didn't see any such rock there at that point as that?

A. I don't know.

Q. That is not the rock that you assayed at 22 and 25 feet is it or any such colored stuff?

A. I don't know; I couldn't say. I have been down other shafts since last June—several of them.

Q. You also took samples there on the other two occasions; did you take any from that exact point?

A. On the 17th I took one at 22 feet and one at 26 feet; that was the first time I was up there with Mr. Lee and Mr. Dahl and I think Mr. Boehmer.

Q. Did you assay those?

A. Yes sir.

Q. What did they run?

A. They ran three sixty, the 26-foot one, and the 22-foot sample ran $7.40.

446 Q. Who broke that rock down?

A. Mr. Dahl.

Q. Then the second time that you were there how many samples did you take?

A. On the 19th?

Q. Above the 34-foot point; we don't want anything below that?

A. Number 6 would be 30 feet below the collar of the shaft east side, $4.00; number 7 25 feet below collar of shaft east side, $4.60; number 8 from 21 to 22 feet below collar of shaft east side, $7.80.

Q. Who broke those down?

A. Mr. Dahl.

Q. Have you got any assay from any rock from 21 feet down to 30 out of the southeast corner of that shaft that you broke off with your own hands?

A. No sir, I don't think I have.

Q. Have you got any that didn't pass through the hands of Dahl first?

A. No I have not; I think Mr. Dahl, Mr. Moore and Mr. Boehmer broke some, but Mr. Dahl did the principle part of it; it was a hard job and dangerous, standing on those stulls and individually I don't believe I broke any.

Q. You say that there is no vein in the Tecumseh shaft?

A. No sir I don't think so.

Q. That is predicated upon your assays?

A. Yes sir.

Q. If you had found assays there of appreciable values say from a dollar up to three or four dollars you would have a different opinion, wouldn't you?

A. I would want to find out where the assay came from.

Q. If you had broken off the rock yourself?

A. Yes, I would develop it a little more; I would not go in on

those cracks and crevices there; if there was a little gold on one of those cracks I wouldn't look for a vein there.

447 Q. You would not look for a vein?

A. I would do some development. There might be a vein if there was some gold there.

Q. You found a vein formation there; you found a fissure well defined?

A. I found a whole lot of those cracks and seams; I don't know whether they were fissures or not.

Q. You found well-defined fissures in the country rock there, didn't you?

A. They might have been.

Q. Continuous from where they came in up about the timbers down to about the bottom of the shaft?

A. Not all of them; there was one there, a crack, that went clear down, I believe; and then there was another one that starts in and quits.

Q. If you could be taken to that shaft and pointed to ore and you could have taken it with your own hands and assayed it you would have pronounced that a vein, wouldn't you?

A. It depends on the circumstances; I would not go right there now and take it a piece of ore and pronounce it a vein. I would do a little development work; I have spent all I made doing such things as that just to find a little gold is no evidence of a vein.

Q. How much gold must you find in a crevice in order to meet your estimate of what a vein is?

A. You would not have to find any; I would always take——

Q. Is it your opinion that there cannot be a vein proven at the depth of 38 feet?

A. Certainly it can, yes; I believe it can.

Q. Why do you say, then, that it must be more developed?

A. If it is proven to be it is all right at 38 feet.

Q. What is required to prove it up?

A. It has got to have a vein; a man naturally would not sink unless he had some indication of a vein of some kind.

448 Q. There is crevice enough to make a vein to find mineral in it?

A. There is crevice enough, yes.

Q. If a person wanting to find mineral goes there and finds it at different places in these crevices, he would pronounce it a vein, wouldn't he?

A. He probably would, yes.

Q. There are various difinitions of a vein, are there not? *A.* I believe you undertook to define them?

A. Just one particular one is the only one I ever defined.

Q. Have you examined scientific works and law works and found that there are ten or fifteen pages devoted to nothing else except the various difinitions of a vein?

A. Yes, that is true.

Q. So that it is a little difficult to get everybody's conceptions of a vein grouped into one sentence, isn't it?

A. Yes, sometimes. You very seldom see two people that will define a vein just the same among mining men.

Q. Is there any iron-clad, stereotyped definition that everybody accepts of a vein?

A. No, I don't think so.

Redirect examination:

Q. You state that in the actual assaying of these samples you used something less than a troy ounce?

A. Yes sir.

Q. How is that selected from the mass of the sample of which it was a part?

A. The amount that would represent the sample—you must remember when I ground this up and crushed it as fine as flour we cut it in three parts; Burdett got one part and I kept a part; we had just an ordinary sample; if you take a sample out of twenty pounds of ore your sample won't weigh much over a pound.

449 Q. You first ground up the whole thing and then mixed it?

A. Yes sir, we cut it in three parts.

Q. You also said that for accuracy everything depended upon the management of the assays?

A. Yes sir.

Q. Tell the jury how careful you were in the management of the assays?

A. I used everything chemically pure; first I tested everything; I would run blanks and I was just as careful and I never left there, and at nights I would put away those that I had assayed; I was just as careful as I could be; I couldn't be any more careful; and I had a nice heat.

Q. You also said that a person could control the result of his assays largely by the samples he selected?

A. Yes sir.

Q. Please state whether or not in taking these samples you ever took anything that looked as though it might assay or took anything that looked as though it might not assay, for any particular reason?

A. No sir, every sample that I took was just as fair an average as I could pick.

Q. And you aimed to get the best that there was?

A. Yes sir.

Q. As well as the average?

A. Just the average was all that I was trying to get.

Q. When Mr. Dahl broke those samples in the Ophir and the other shaft did he go to any particular place selected by himself, or did he take the measurements or places selected by others, or was there a general place selected?

A. It was measured by Mr. Moore, I think; with a steel tape and we would all go there and Mr. Boehmer and Mr. Burdett—we

would be right there all standing around on the ladders and take it. I was within two feet of Mr. Dahl.

Q. How did Mr. Dahl stand?

A. On the ladder and on the stull.

450 Q. One foot on the ladder and one foot on the stull?

A. One foot on the ladder and one foot on the stull.

Q. And using the pick with one hand; where would his other hand be?

A. His other hand would be around the ladder, picking this way.

Q. I will ask you to tell the jury if it would be possible, even if he was so disposed, for Mr. Dahl to interfere with these samples under those circumstances, or anybody else?

A. I can't see how any one could do it.

451 F. G. BURDETT, being first duly sworn on the part of the defendants, testified as follows:

Q. What is your first name?

A. F. G. Burdett.

Q. Where do you live?

A. I live in Anaconda, Colorado.

Q. How long have you resided in the county?

A. I have been in the district there since the 17th of November, 1896.

Q. What is your business?

A. Assaying.

Q. How long have you followed the business of assaying?

A. I have followed it more or less for twenty years—a little over.

Q. In what parts of the State have you followed that business?

A. I have followed it in Boulder county, in La Plata county and in this county.

Q. Do you know where the Tecumseh and Ophir locations are that are in controversy here?

A. I do.

Q. How long have you known of them?

A. The first time I was at the Tecumseh was on the 11th day of May 1897.

Q. When were you first at the Ohpir mine, if you remember?

A. I think I was first there on the 17th.

Q. Of the same month?

A. Of May.

Q. Have you been to either of these places since that time?

A. Yes sir, I have.

Q. Did you take or assist in taking any samples for assay from the Tecumseh and Ophir discovery shafts?

A. Yes sir.

Q. During the month of May 1897?

A. Yes sir.

Q. Who was with you when you took these samples, say from the Tecumseh on the 11th?

A. Mr. Dahl, and Mr. Mitchell and Mr. McAllister I think were with me; I don't recollect whether any more was with me or not.

452 Q. Did you take on the 11th of May any samples from the Tecumseh shaft?

A. I did.

Q. How many?

A. I took six.

Q. Was that the occasion of your first visit there?

A. It was.

Q. Was that the 11th of May that you took those?

A. That was on the 11th of May.

Q. From what parts of the shaft did you take those samples?

A. We took number one from the northeast end of the shaft, number two southeast end of shaft, number three east side of shaft, number four north one-half of northwest side, number five from bottom of shaft, number six west side of south half of shaft.

Q. Were those samples taken from any seams or fissures in the shaft or from the rock generally around the shaft?

A. Number one, two, three, four and six were taken standing on the bottom of the shaft and picking up about six feet, probably, high.

Q. And the other one?

A. The other one was taken lengthwise in the bottom of the shaft.

Q. Who helped you take these samples?

A. I took them myself.

Q. What did you put the samples in after you took them?

A. Put them in sacks.

Q. What sort of sacks, new or old?

A. New sample sacks.

Q. What did you do with them after?

A. I took them to my office.

Q. Where was your office?

A. Anaconda.

Q. What did you do with them then?

A. I crushed them, sampled them and assayed them.

Q. Did you have charge of them yourself?

A. I did.

Q. From the time they were broken until they were assayed?

A. Yes sir.

453 Q. Did you make any test of your fluxes?

A. I did.

Q. Did you find them chemically pure?

A. I did.

Q. What was the result of those assays?

A. All six of them were traces.

Q. What is meant by a trace as used in assaying?

A. It is a small particle of gold too small to ascertain the value.

Q. Did you take any other line of assays in the Tecumseh shaft?
A. I took four on May 19th.
Q. Where were those taken from?
A. Number one was taken from the east end of cross-cut; number two was taken from streak east end of shaft; number three average of streak northwest end of shaft, number four sample of streak west end of shaft.
Q. Who was with you when those were taken?
A. Mr. Dahl, Mr. Doyle and Mr. Moore, and I think probably there was another man or two there; I think probably Mr. Boehmer was there; I ain't right certain.
Q. How were those samples broken and preserved; who broke them down, how were they broken down and what was done with them?
A. I think Mr. Dahl broke them.
Q. Who put the samples in bags and took care of them afterwards?
A. I put them in myself.
Q. As the pieces were broken from the walls of the workings you put them in, did you, as the pieces were broken?
A. Yes sir, as they were broken down.
Q. What did you do with them then?
A. I put them in a sack and tied them up.
Q. Then what did you do with them?
A. Took them to my office.
Q. Did you make any assays of them?
A. Yes sir.
454 Q. What test, if any, did you make of your ingredients before assaying?
A. I always test my fluxes.
Q. You always do that?
A. I always do.
Q. And did you find them chemically pure?
A. I did.
Q. What was the result of those assays?
Q. They were all traces.
Q. Like the others?
A. Yes sir.
Q. Have you since the last trial made any further tests of the rock in the Tecumseh shaft?
A. I have.
Q. When was that, about when?
A. The samples were taken June 11th, 12th, 14th and 15th.
Q. Who were with you?
A. Mr. Doyle.
Q. And you took them together?
A. We took them together, yes sir.
Q. Did you hear Mr. Doyle's testimony as to the manner of their taking and the places from which they were taken, when on the stand?
A. I did; I heard it.

Q. Without going through a repetition of the same thing, is his statement of the places and the times when they were taken and the manner in which they were taken in accordance with your recollection of it?

A. Yes sir, about the same.

Q. What did you do with those samples?

A. We put them in sacks and sealed them up with sealing wax; we first tied them and then sealed them up; we took them to Mr. Doyle's office and placed them in his safe; we took them samples together and put them in one sack.

Q. When you got to Mr. Doyle's office where did you put them?

A. Put them in his safe.

Q. Did you make any assays of them in connection with Mr. Doyle or apart from him?

A. Mr. Doyle and I crushed them up in his office and
455 sampled them there and divided them; I took one-half of the samples and he took the other after they were crushed up on an iron plate.

Q. Is that what is called the pulp of the sample, after grinding?

A. No sir, that is not the pulp, that is the sample; after grinding it through the crusher we run it through a little crusher and grind it up about the size of small peas, and then we mix that together and divide it; he took one-half and I took the other.

Q. Then you grind it still finer?

A. I took a portion of it up to the office and got it down smaller, took a sample of it and ground it up to 80 mesh and prepared it for assay.

Q. Did you make the same kind of assay, fire, crucible assay?

A. I made a crucible, fire assay.

Q. Did you assay each of the 182 samples thus taken?

A. I did.

Q. About how long did it take you to do it?

A. I can't tell that.

Q. Did you do it as one job, that is what I mean?

A. No, I was nearly a month before I got them all done.

Q. How were those samples protected or taken care of during the time?

A. I placed them all in my scale-room which I keep, and nobody goes in there except myself and my son.

Q. Is your son your assistant in assay-work?

A. He is my partner.

Q. You may state the result of the assays which you made of those samples?

A. Samples number one, southwest corner of shaft ten feet below collar—do you want me to give the result?

Q. You need not give the result in each instance unless they differ; I will ask if there is any difference in the general result?

A. There is a little difference; number one sample, south-
456 west corner of shaft ten feet below collar, a trace.

Q. You can state the result of any of those samples that gave more than a trace; go right to them if you have any that gave

more than a trace, you can specify them, and the others can be r ferred to generally?

A. Number two west side of shaft ten feet below collar, numbe three west side of shaft, 11 feet below, number four 12 feet below, 13 feet below——

Q. You need not testify where they came from because you sa that Mr. Doyle's testimony as to that is correct; if you have any them that gave more than a trace state what they are and whe they came from or any of them that did not run a trace?

A. They all ran a trace down to 56; in number 56 I got eight cents.

Q. Where did number 56 come from?

A. Southwest end of shaft 33 feet from the collar.

Q. Now then go to the next one, if any, which gave more than trace?

A. The next one was number 91, southwest end of shaft, 27 fe from collar. That gave 60 cents.

Q. Now go to the other that you have?

A. Number 108 north end of shaft 28 feet from collar I didn find anything in it; I didn't get a trace; number 115 northeast en of shaft 25 feet below collar I didn't find anything; number 1 roof of east drift 19 inches from face I didn't find a trace; all t balance of them ran a trace.

Q. Is it or not a fact that a trace of gold can be found in what called the country rock on Raven hill and in that district at almo any place?

A. I don't know; I have made a great many assays since I ha been in Cripple Creek, that I didn't get any more than a trace gold out of.

457 Q. Would you say that there is a vein in that Tecums shaft after this examination and assaying?

A. I would not say that there was a vein in that shaft that wou carry any quartz.

Q. What do you mean by quartz?

A. I didn't see any quartz in there, gold-bearing quartz.

Q. Did you see any gold-bearing rock of any kind in there?

A. I didn't see anything but porphyry.

Q. In taking these samples did you aim to take the best y could find at different places so as to make a fair test of the con tions?

A. We sampled the inside of that shaft nearly all over; the was not much ground left there but what we took samples from.

Q. In addition to the assays there made did you take any sa ples or assist in taking any samples of assays from the Ophir shaf

A. I did.

Q. When was that first?

A. The first samples I took from the Ophir shaft was on the 17 of May.

Q. Who were with you at that time?

A. I was with Mr. Henry Dahl, Mr. Doyle, Mr. Moore and M Boehmer.

Q. From what part of the shaft was a line of samples taken then?

A. Number one was taken from the top of drift south of shaft; number two twelve feet south of shaft; number three eight feet north of shaft; number four 42 feet north of shaft; number 5 35 feet below collar of shaft, east side; number 6 30 feet below collar of shaft; number 7 25 feet below collar of shaft; number 8 22 feet below collar of shaft; number 9 northeast side of shaft; number 10 west side of shaft.

Q. The last two mentioned, were they duplicates of that
458 given to Mr. Doyle or were those given to you only?

A. I don't know whether Mr. Doyle got duplicates or not.

Q. How were those samples broken from the walls and how were they preserved?

A. Mr. Dahl picked them down and I put them in sacks myself.

Q. How were they taken care of afterwards?

A. I tied them up and took them home and put them away until I got ready to test them.

Q. Did you assay them in the same manner that you assayed the other samples?

A. I did.

Q. Give the results of the assay?

General JOHNSON: If it will facilitate anything, I will admit that there is a well-defined, mineral-bearing vein throughout that shaft from 34 feet down, and throughout the drift.

Q. Give the assays then that were taken at any place, in the Ophir shaft, that were taken above 34 feet from the collar; that would be the last three or four that you read there.

A. Number 6, that was 30 feet below the collar of the shaft.

Q. Start with that one; what was the result of that?

A. $1.40; number 7, 25 feet below collar of shaft, a trace; number 8, 22 feet below collar of shaft, a trace; number 9, northeast side of shaft, a trace.

Q. How far below the shaft was that, number 9?

A. I don't know how far it was.

Q. It was above the 34-foot point?

A. I don't see the distance.

Q. Those were the two samples that Mr. Moore testified to as having been given you, were they?

A. I think so.

Q. Proceed?

A. Number 10 west side of shaft, a trace.

459 Q. The last four then to which you have testified produced a trace?

A. Yes sir.

Q. Did you take any samples or assist in taking any samples from the Ophir shaft after the 18th of May above that point?

A. I did on the 27th of May.

Q. Who was with you when they were taken?

A. I think about the same parties were with me as near as I can recollect.

Q. How were they taken?

A. They were taken by Mr. Dahl.

Q. Did you take the pieces making the samples?

A. I did.

Q. And put them at once into the sacks as you did the other?

A. I put them at once into the sacks.

Q. Was there any interference of any kind with those samples from the time they were broken until you assayed them?

A. No sir, not that I know of.

Q. Give the results of that line of assays and confine your answer to those above the 34-foot point?

A. Number one 22 feet below collar of shaft $20.80; number 2 25 feet below collar of shaft gave $21.20; number 3, 30 feet below collar of shaft gave $10.60.

Q. Those are all of that series above the 34-foot point?

A. That is all.

Cross-examined by General JOHNSON:

Q. Who broke those samples from the wall?

A. The last ones?

Q. Yes?

A. Mr. Dahl picked them down.

Q. And handed them to you?

A. Yes sir; I got the sample as it was picked off myself, and put it into the sack and part of it he got and put in the sack.

Q. You didn't see him sprinkle any gold dust on any of
460 these samples?

A. No sir, I don't think he had any to sprinkle; I didn't see any.

Q. You don't think he had any along with him?

A. I didn't see any gold dust.

Q. Do you say it was impossible for a man to do that?

A. No, I suppose it could be done.

Q. You were not watching to see whether there was anything wrong going on there or not?

A. No sir, I was taking care of the samples; I didn't watch him.

Q. How long have you been in mining camps?

A. Off and on for about thirty-seven years.

Q. In assaying these 182 samples how much did you take as an assay ton?

A. I took a half assay ton to a cup.

Q. How much ordinary weight would that be?

A. That would be a little less than a half ounce avoirdupois; I couldn't tell exactly.

Q. A little less than half an ounce?

A. I couldn't tell exactly.

Q. Wasn't it practicable for you to have assayed two or three or

three or four ounces of that material, together just for once, just to see what it would run?

A. I did; I assayed two assay tons; put them together and ran four cups, a half assay ton in each cup and put them all together.

Q. Was that assay the one that produced eighty cents?

A. I don't recollect now; I ran duplicate on all of them and on some I ran more; I couldn't tell what that one that ran eighty cents was.

Q. The more ore you take to make an assay the more liable you would be to get gold enough to assay?

A. Yes sir, unless it was very low-grade ore; the more assay you take where there is gold at all the more gold you

461 would get.

Q. Is it not a fact frequently that gold if assayed in that way larger quantities of ore will yield a dollar or more if it is handled say by the scorification process, where you only take one-tenth of an assay ton, that you will still get a weight?

Q. You might get a weight in an assay ton of ore where you could not get a weight on a tenth assay ton.

Q. So, if you would take several assay tons together you would be more likely to get a weight?

A. You would get a larger amount of gold.

Q. About what amount of gold can you weigh with your scales?

A. It is possible to weigh down to ten cents—one-one-hundredth, but it takes a long time to do it.

Q. If you take that piece of paper you would have no trouble in weighing it, would you, on your scales?

A. No sir, not at all.

Q. Suppose I make a pencil-mark on it; can you tell me the weight of that pencil-mark.

A. I think I can, probably tell the weight of that pencil-mark.

Q. You ought to be able to tell the weight of that pencil-mark?

A. Yes sir and I think I could.

Q. Did you do any such delicate weighing and assaying as that?

A. I don't know what that pencil-mark will weigh without weighing it.

Q. You can't say how much of that ore you used in these two assays that you got 60 cents and 80 cents out of?

A. No, I cannot.

Q. In your examination of the Tecumseh shaft you didn't see any quartz?

A. I didn't see any quartz, no sir; I didn't see any quartz that I know of. I didn't see any genuine quartz in my samples.

462 Q. If there is any quartz in those crevices then you don't know it?

A. No, I don't know it.

Q. Do you think it could be there without your knowing it?

A. It might be and I would not notice it or observe it.

Q. Were you particularly searching for quartz or something that would assay there or were you taking a general average of that shaft?

A. I was just taking a general average of that shaft.

Q. Those assays that you made from rock that came from above 30 feet in the Ophir shaft were all from rock handed to you by Mr. Dahl?

A. Mr. Dahl, yes sir.

Q. Was any of that rock like that in color?

A. I don't know; it has been so long ago and I have made so many assays that I would not know what color that rock was now; I don't recollect.

Q. You don't recollect the color of it?

A. No; where a man is making so many assays he don't pay much attention to the color of rock.

Q. You were up and down that shaft and saw the vein, didn't you?

A. Yes, I was up and down the shaft.

Q. Did you do any measuring?

A. No sir, I didn't do any measuring myself, not in the Ophir shaft.

Q. You noticed that these assays came from a certain point?

A. Mr. Moore, I think, was the man that done the measuring.

Q. Did you look at that vein in the Ophir?

A. I didn't pay much attention to it, no sir.

Q. You saw it?

A. Yes sir.

Q. You saw it where it came in on one side of the shaft down to the bottom, didn't you?

A. I couldn't say as to that.

Q. And you saw it where it crosses over the shaft, didn't
463 you? All the way up right by the side of the shaft?

A. I only noticed the ground where these samples were taken from.

Q. You took samples all the way down, didn't you?

A. I took the samples that is described in this list.

Q. They go from 21 feet down, don't they, to the bottom of the shaft and through the drifts?

A. 22 feet, I think.

Q. All through?

A. Yes sir.

Q. Didn't you look up where you could distinctly see with the eye where that vein passes out of the shaft and into the wall?

A. No sir.

Q. You didn't look at it there?

A. I didn't notice it at all.

Redirect examination:

Q. You say the more ore you take for sample the more gold you get?

A. Yes sir.

Q. Do you mean you get more gold per ton or more in the sample?

A. No, you get a larger quantity of gold.
Q. It would be the same proportion per ton?
A. Yes sir, it would be probably the same proportion to the ton a larger bulk.
Q. Have you ever tried to weigh a pencil-mark upon a paper on your scales?
A. Not with the scales that I have at present.
Q. Isn't it a fact that it is only the more delicate scales that can that?
A. Yes sir.
Q. Do you know of a scale in Cripple Creek sufficiently delicate that purpose?
A. I could weigh a pencil-mark on my scale but I never tried it.
Q. You mean to say that there are scales sufficiently delicate in echanism to do that?
A. Yes sir.
Q. In taking the samples of ore from the Tecumseh shaft were you not instructed to take a sample of everything that owed itself there that you thought would assay?

Objected to; overruled; exception.

A. I don't recollect whether I was instructed to do that or not.
Q. In taking your samples there did you or not aim to take everything that you thought would assay?
A. In the Ophir shaft?
Q. From the Tecumseh shaft?
A. What line of samples do you have reference to?
Q. Any of them; these 182 samples?
A. Yes sir, I think I was instructed to take anything.
Q. And everything?
A. And everything, the first time I was there, yes sir.
Q. And you did so; I am talking about the 182 samples?
A. The 182 samples we were instructed by Mr. Moore to follow ertain lines and take samples in certain streaks.
Q. That was all the streaks and all the places in the shaft wasn't ?
A. Yes sir, everything in the shaft.

PETER JOHNSON, being first duly sworn on behalf of the defendnts, testified as follows:

Q. Where do you live?
A. In the Cripple Creek district.
Q. How long have you lived up there?
A. Four years.
Q. What is your business?
A. Mining.
Q. How long have you followed the business of mining?
A. Five or six years.
Q. Anywhere else than in Cripple Creek?
A. Montana.

Q. Do you know where the Ophir claim is located on Raven hill?
A. Yes sir.
465 Q. When did you first know anything about it?
A. In 1895.
Q. About what time?
A. The first part of June.
Q. Did you do any work at that time on that shaft?
A. Yes sir.
Q. Who with?
A. Mr. Mears.
Q. I show you a paper marked Exhibit A 1, and ask you if that is your signature?
A. Yes sir.
Q. Was it under that contract that you did some work there?
A. Yes sir.
Q. What sort of work did you first do on that shaft?
A. We was cleaning it out.
Q. About how much debris or snow or ice or waste matter did you find in the shaft when you began?
A. I couldn't tell exactly; it was quite a little, 15 or 16 feet or so.
Q. What was the stuff that had accumulated to that depth?
A. It was ice and snow and a lot of rock and stuff.
Q. About how long were you at work there cleaning it out?
A. About two days, probably, or three; I don't know, I don't think it was more than two.
Q. Was Mr. Mears working with you at the time?
A. Yes sir.
Q. After you got it cleaned out did you measure it?
A. Yes sir.
Q. How did you measure it?
A. By a tapeline.
Q. How deep did you find it?
A. 28 feet.
Q. From what point near the surface did you measure it?
A. From the collar of the shaft.
Q. Had you put any new timbers or any additional set of timbers at the collar before you began work?
A. Yes sir, we put one there but we didn't measure from that; we measured from the old timbers.
Q. That is the set of timbers that would be underneath
466 the new ones that you put there?
A. Yes sir.
Q. How deep did you say you found it?
A. 28 feet.
Q. Who helped you measure it?
A. Dahl.
Q. After you got it cleaned out and measured it, what did you do?
Q. Started on the contract to go down on it.
Q. You remember how deep you sunk it in all?
A. I sunk it down 42 feet.
Q. 42 feet from where you started or from the collar?

A. From where I started.
Q. About how long were you there sinking the shaft?
A. I couldn't tell not, it is so long.
Q. What is your best recollection?
A. Three or four months or so; I couldn't tell exactly.
Q. What if anything did you notice as to the existence or appearance of ore on the bottom of the shaft at the point where you began to sink?
A. I found some rock there.
Q. Did you save any of it at that point?
A. We saved some of it, yes sir.
Q. What did you do with it?
A. We laid it upon the dump.
Q. Did you give any of it to Mr. Dahl or take it down to Anaconda?
A. Yes sir.
Q. How near to the 28-foot point did you first notice this ore, this mineral?
A. Right there after we started.
Q. How did you tell it from any other rock that is there?
A. It looks different and harder than the rest of it.
Q. What is the country rock there?
A. Porphyry.
Q. Now was there any particular part of the shaft, the bottom of the shaft in which you found this ore or this harder material?
467 A. Yes sir.
Q. What part of it?
A. In the southeast corner.
Q. What work did you do after you got the shaft sunk down to 70 feet?
A. We drifted.
Q. What did you drift on?
A. On the vein.
Q. State whether or not this rock that you say was harder which you found when you began, continued on down the shaft from that point to the bottom?
A. Yes sir, it did.
Q. Would you call that a vein or a lode?
A. I would call it a vein, if anything.
Q. Where is Mr. Mears now, if you know?
A. I don't know; I haven't seen him for seven or eight months; I don't know where he is.
Q. You have no knowledge of his whereabouts?
A. No; the last I heard of him he was down prospecting somewhere.
Q. Did you receive any pay from Cone and Robison for cleaning out that shaft?
A. Yes sir.
Q. Do you remember how much?
A. I think it was two days; I am sure it was two days if not more.

Q. You are quite certain of that are you?
A. I am certain.

Cross-examined by General JOHNSON:

Q. Your contract called for cleaning it out without pay, didn't it?
A. Yes, but we got paid for our work; we cleaned it out before the contract was wrote out.
Q. If the shaft had been cleaned out before this contract was drawn, what object was there in saying anything about cleaning it out, in the contract?

Q. We was to take a contract there but when we came over
468 there we found the shaft full of snow and ice and we didn't know how far it was to the bottom and we had to clean it out in order to get down to the bottom and see how deep it was.

Q. Then you cleaned out the shaft before you went into this contract at all?
A. Yes sir.
Q. Before it was signed and before it was drawn?
A. Yes sir.
Q. Why did this contract recite this, to take out all snow and ice now in said shaft at their own cost; why was Mr. Cone making you agree and why were you agreeing to do that at your own cost if it had already been done and you had been paid for it?
Q. The superintendent of the mine he told me to clean it out and he would pay me for my work; we cleaned it out and it took me and another fellow two days to clean it out, so we got paid three dollars a day for doing that.
Q. I wish you would think the matter up, it has been some length of time since then, and say whether the fact is not that you cleaned this shaft out at your own expense but that before you started on this contract you did a couple of days' work there in sinking?
A. That was not sinking; that was cleaning it out before we started to sink on it.
Q. You had a windlass there?
A. Yes sir.
Q. And you first cleaned out the snow and ice?
A. Yes sir.
Q. Then didn't you haul up some rock?
A. Yes, there was a lot of rock in the bottom of it mixed with the snow and ice, and stuff.
Q. Was that loose rock?
A. Part of it loose and part was froze to the snow, froze solid.
Q. Didn't you do considerable picking there?

A. Not very much; we picked a little to loosen it up so
469 that we could shovel it in the bucket and send her up.

Q. Didn't you do some blasting?
A. No sir.
Q. Are you sure about that?
A. I am.
Q. Wasn't that shaft 25 feet deep and didn't you sink it there on

day's wages three feet before you measured it and went on this contract?

A. No sir, it was 28 feet after we got it cleaned out to solid bottom.

Q. Withing any sinking at all?

A. Yes sir.

Q. And it was for cleaning it out that you were paid and not for sinking?

A. For cleaning it out and not for sinking.

Q. Then this written contract that you would clean it out at your own cost is entirely wrong, is it?

A. It ain't wrong, but he just paid us of his own will.

Q. They entered into a contract making you clean it out at your own cost and still they paid you for it?

A. Yes sir, they did.

Q. And you did nothing else there to be paid for?

A. No sir.

Q. Prior to starting on the 42 feet?

A. No.

Q. How long had you been at work there before you noticed any difference in this southeast corner than any of the balance of the rock?

A. It was right after we started in on it.

Q. You didn't notice any difference before you went to work there?

A. No sir.

Q. It all looked just alike?

A. Yes sir.

Q. You didn't suspect there was any vein in there when you went to work, did you?

A. I wasn't looking for any vein.

Q. You didn't see any did you?

A. No, I couldn't see any because the shaft was full of snow and the walls was frozen and wet.

Q. I am speaking of after you had it all cleaned out and
470 you had measured it up before you had commenced to sink?

A. I never looked for any.

Q. Wouldn't you have seen it if there had been one there while you were working around that shaft?

A. I might have if I had been looking around and wasn't doing anything else; but my business was to sink on it and as soon as we started in sinking we found the difference in the rock.

Q. How far had you gone before you noticed any difference?

A. Probably a day or so.

Q. How many days had you been at work there?

A. A day or two; the next day after we started.

Q. How do you come to remember that distinctly?

A. Because.

Q. It is several years ago?

A. I remember I brought some pieces down to Dahl's house and we found it looked pretty good.

Q. Wasn't that after you got down to this vein at 34 feet that you took that rock up to Mr. Dahl's?

A. It was right after we started to work there; it wouldn't be the first day, it must be the second day, because we shot around there.

Q. And you found that this rock was merely a little harder?

A. Yes sir.

Q. H[illegible]n't that rock changed to colored rock when you took it up to Mr. Dahl's?

A. It might have been changed; I don't remember what color it was on it.

Q. You remember distinctly the day you broke into the vein, don't you?

A. Yes, sir, I remember when we struck that rock, I remember that place all right.

Q. When you struck that rock?

A. That was in the vein there.

471 Q. You remember distinctly the occasion of striking that rock?

A. That hard rock that we struck.

Q. You remember distinctly the day you broke into the vein, don't you, where you found the walls filled with that colored matter? You remember that day, don't you?

A. Yes sir.

Q. Is that the day that you mean you found it harder?

A. It was the same kind of rock, it must be the same day.

Q. Do you mean to say that you found this colored rock like this or anything colored that way?

A. I don't remember what kind of a color it was but it was harder than the rest of it.

Q. That is the kind of rock that you took and showed Mr. Dahl, isn't it?

A. I couldn't tell whether it is or not; I never took any particular kind of notice what kind of rock it was.

Q. Do you remember how deep you got before you got that kind of rock?

A. The rock I am speaking about was right after we started work.

Q. It was right after you started that you got that kind of rock?

A. I don't remember if it was the same kind as that, but it was harder than all the rest of it.

Q. It was harder and it was colored, wasn't it?

A. It must have some color to it.

Q. You knew then when you struck that kind of rock that you had some to a vein?

A. I had an idea.

Q. Then you took the rock and showed it to Mr. Dahl?

A. Yes sir.

Q. Did he go up and look at it?

A. Yes sir, he was there and looked at it.

Q. You had a sort of jubilee over it then?

A. There was not much difference to me whether it was
472 ore or not; I had to go ahead with my contract.
Q. That was after you got down 34 feet wasn't it?
A. No it was not; it was right after we started.
Q. You didn't find any such rock as that until you got down about 34 feet, did you?
A. I couldn't tell what kind of rock it looked like; I couldn't tell by that rock; I found that hard rock there.
Q. You didn't find any rock that was materially different in color from the regular color around the sides of that shaft in color and appearance to the eye until you got down about 34 feet, did you?
A. We had it all the way down from the time we started on it.
Q. The same rock that you found at 34 feet you had all the way down?
A. It might have been a little different in color but the same kind of rock all right.
Q. You know a vein when you see it, don't you?
A. Yes sir, I guess I do.
Q. You knew when you came to that vein in the Ophir shaft, didn't you?
A. Yes, I had an idea it was a vein I struck there.
Q. You knew you came to that vein at 34 feet from the surface, didn't you?
A. It couldn't be 34 feet from the surface.
Q. Did you ever measure it?
A. I helped to measure it before I took the contract.
Q. Did you ever measure it down to the vein?
A. No, I never measured it down to the vein.
Q. Did you do this drifting under contract, also?
A. No sir.

Redirect examination:

Q. You are quite sure that there was no sinking done after you cleaned out the shaft until you began at the 28-foot point?
473 A. No sir.
Q. And that this hard rock that you have described that you took to Mr. Dahl was found right at that point where you first began work?
A. It was found after we shot the first round of holes there.
Q. That would knock out about how much?
A. About seven or eight inches or so.

E. M. De Lavergne, being first duly sworn on behalf of the defendants, testified as follows:

Q. Where do you live?
A. My home is just below Colorado Springs.
Q. How long have you been a resident of this county, about?
A. I have had a home there for 18 years.

Q. During that time what has been your occupation?
A. I have been mining all the while except about four months.
Q. How long have you been mining in Cripple Creek?
A. I have been there over seven years.
Q. Are you one of the locators and discoverers of the Raven mine on Raven hill?
A. Yes sir.
Q. And the Princess?
A. Yes sir.
Q. State whether or not since that time you have been acquainted with the character of that hill, or a great part of it, and the mines upon it?
A. I have.
Q. And with the camp generally?
A. Yes sir.
Q. Do you know where the Tecumseh and Ophir locations are on Raven hill?
A. Yes sir.
Q. How long have you known of them?
474 A. I have passed them every week or so for a number of years, but I never knew of them particularly until I went to make an examination about ten or twelve days ago.
Q. That is, your knowledge of their whereabouts has been general until quite recently?
A. Yes sir.
Q. Have you examined the Tecumseh discovery shaft lately?
A. Yes sir.
Q. How long ago?
A. I think it was ten or twelve days ago, somewhere along there.
Q. In company with whom?
A. Mr. Darby, Mr. Moore, Mr. Smith and Mr. Dahl was there at that time.
Q. Please describe that shaft to the jury as you saw it,—the Tecumseh shaft; what does it show?
A. That is a shaft about 38 feet deep, with a drift towards the east; I forget the length of the drift; it is short—18 or 20 feet; I didn't take measurements particularly. Beginning from the surface of the shaft you will notice some parallel planes or cracks in the breccia that bear a little to the west and to the south, descending in the shaft and after you get down pretty near the bottom, about eight feet from the bottom, you come to another one of these that the rock is broken off from giving it the appearance of a wall and then you will find back in the breast of the drift another one dripping exactly the same way, has the same appearance, and as you descend from the surface of the shaft down on the west side there is another one of these planes that shows dipping exactly in the same direction, stained with iron on the surface, I think. Any one of these crevices would present the same appearance if a slab should come off of it anywhere in that shaft.
475 Q. Did you notice any other fractures running in any other direction than up and down?

A. Yes; there are horizontal planes, they are not exactly horizontal but dipping to the west, which would, I approximated, reach the surface nearly one foot away, or something like that, cutting right across these planes that come down.

Q. What is the prevailing rock of that hill?

A. It is breccia.

Q. What do the miners ordinarily call it?

A. Porphyry.

Q. What would you call these openings or planes of which you speak?

A. I have had a good deal of experience with those; you will find them, I think, everywhere on that hill; all over that hill; they run pretty nearly north and south generally there; they are cleavages in the rock; I think you can find the same anywhere by sinking a shaft anywhere around there, just about the same.

Q. What do you understand by the term vein or lode?

A. In the first place I understand a vein should have walls, and I don't know as it is necessary to be mineralized highly to be a vein; we have two classes of veins in Cripple Creek; what is commonly termed there as the soft and the hard veins; you hear the miners speak of them all around there; they both carry mineral; the soft veins have a selvedge, that is the basalt veins have selvedge and suit the description you get in the books very nicely. What we call hard veins may be very narrow and they are mineralized.

Q. Is it or not your experience that the ore or the metal in the country is blended with the walls of fissures?

A. On what you call hard veins, they are; the ore will gradually merge into the breccia with no line of division at all; it
476 will gradually mineralize back.

Q. How do you discern where the ore ends and the country begins?

A. You can only do that by assaying.

Q. Is there, in your judgment, from your examination, any vein, lode or ledge in the Tecumseh discovery shaft?

A. I don't think there is; I would say this: In order to determine at once whether there was, a vein there or not I should look for the hardening of that porphyry between these crevices that descend, that I described as going down, and seeing if it assayed, and if there was anything different from what there is on all sides in the country around it, I might think that one of those was a vein.

Q. Would the assays or not have to be continuous in order to determine that?

Plaintiff objects; objection overruled, defendants excepting.

A. I don't think it is necessary that the assay values should continue down at all points in order to determine a vein.

Q. Suppose that in that 38 feet assays should be found, showing some value at the 16-foot point, at 22 feet and at 24 feet, and of 16 tests made in that section of the shaft, six of them should show appreciable quantities and others only a trace with nothing but a

trace above and beyond that point, would you call such a showing as that an indication of a vein?

A. No, I think not.

Q. Is it or not a fact that a trace of gold can be found more or less through the country rock on that hill?

A. We hardly ever get less than a trace up there, I don't think.

Q. Did you at the same time, or at any other time, make an examination of the Ophir discovery shaft?

A. I did, the same day.

477 Q. Please describe that as you remember it.

A. The Ophir shaft is timbered down, I think, ten feet; it may be a little more; as you descend in that shaft, at about 33 feet, I think, we come to the wall; that continues on down and goes in the southeast corner of the shaft. As we get to the bottom I think it has crossed the shaft; in that wall about the opposite corner, it has a little dip to the west; it is what I should consider one of those hard veins in the Cripple Creek district; it shows mineral.

Q. With the mineral extending into the walls, as you have described it?

A. Without examining that carefully and without much experience in that district, a person would naturally come to the conclusion that he had no vein until he got to 33 feet; but an experienced person in the Cripple Creek district and especially with the character of veins that we have there, would see a hardening of the quartz.

Plaintiff objects.

Q. Tell what you saw.

A. I saw a hardening of the quartz of the breccia, back, I think, as much as three feet of the vein, from the walls of the vein which extend up the shaft; I stood on a round of a ladder, when my feet were where the walls first show, and I noticed that distinction in the rock, the hardening of the rock, and I had a little pick and picked into it in some points. I could tell by the fire from the pick that the quartz is harder there up to about six feet above where the vein shows in the corner of the shaft; and, if I was looking for a vein there I am satisfied that I would have evidences of a vein when I was seven feet above or eight feet above where the wall first shows in the shaft.

Q. And vein matter in the shaft?

478 A. There is no gangue there, it is quartz.

Q. It is ore?

A. It is ore, yes sir.

Q. In place?

A. Yes, sir.

Cross-examined by General JOHNSON:

Q. When did you examine this Tecumseh shaft?

A. I think it was the same day Mr. Moore and Mr. Darby were there, that cold day; I know it was a cold disagreeable day, but I forget the date; I don't think I kept a memorandum of it, but it was ten or twelve days ago.

Q. Were you there more than once in the shaft?
A. Only one day.
Q. How long were you in the mine?
A. We were in there, I guess, five hours altogether, in the two shafts.
Q. You speak of these veins in Cripple Creek being hard and soft?
A. Yes sir.
Q. Is it not a fact that those crevices in the Tecumseh shaft are pretty well defined?
A. Yes sir, they run very regularly up and down the shaft.
Q. Are they not much more well defined than the ordinary joints in porphyry?
A. No, think not.
Q. Do you mean to say that kind of parallel crevices can be found everywhere there?
A. That has been my experience on that hill, yes sir.
Q. Does every shaft contain them?
A. I cannot say whether every one, most of them do, I think—what I have had any experience in; they may not run practically straight down as these do, but they run parallel with each other.
Q. I am speaking of those which run regularly and continuously as far as these do and as regularly as these do and as consistent with each other as these do, are those common in that porphyry?
479
A. Yes sir, I don't think the depth changes them very much in my experience.
Q. Veins themselves are pretty common are they not on that hill?
A. No, not so very.
Q. Raven hill is pretty well cut up with veins, isn't it?
A. There are a number of veins; I have got a tunnel that is bored over two-thirds of the way through it, and I can go a good ways sometimes without touching anything that looks like a vein.
Q. There are, however, a great many veins on Raven hill, are they not?
A. Yes sir, a great many veins we consider them.
Q. Did you find a crevice in the Tecumseh discovery shaft—what you call a crevice?
A. You find where the rock is evidently opened far enough for water to seep down there and discolor the lines so that you can see it.
Q. Did you find any place where it was open far enough so that you could put your hand in it?
A. No sir.
Q. Do you say there is not any such place?
A. I don't think there is in that shaft.
Q. If there is you are not down to it?
A. I never saw it; I think I was all through there in the shaft.
Q. Did you see any openings or crevices there that you can insert a lead pencil in?

A. That is getting down pretty fine; it might be possible I can.

Q. You saw no place, however, where those cracks opened out so that the walls were distinctly separate from each other?

A. I don't think I saw anything like that.

480 Q. For the space of an inch or two or three inches?

A. No sir, I did not.

Q. Two inches?

A. I did not.

Q. One inch?

A. When you get down to a small matter like that I would not be positive on that.

Q. You say those cracks are iron-stained?

A. Yes sir.

Q. What is that selvedge?

A. Your vein may be breaking across the general cleavage of the country and the selvedge runs right along with the veins; it is kind of a casing matter between.

Q. What sort of material is that casing?

A. It is commonly termed basalt, a soft material, that slacks when it is thrown out on the ground.

Q. Did you find anything of that kind there?

A. No sir.

Q. Did you pick into those crevices or try to get into there and examine the material in them?

A. Yes sir, I picked around wherever I could find any evidence of it and broke pieces off where I thought there would be any mineralization if there was any vein there?

Q. Did you find any place where there was any soft material in these crevices?

A. No.

Q. Did you find any hard material in the crevices?

A. It is a little harder where the water filtered through and the iron deposited.

Q. Did you see any quartz there?

A. You speak about the Tecumseh shaft?

Q. Yes sir?

A. No sir.

Q. Any kind of quartz?

A. No sir.

Q Nothing of the quartz character?

A. No sir.

481 Q. If there is any quartz in any of those crevices you didn't see it?

A. I didn't see it, no sir.

Q. How far will the ore blend into the country rock in a vein like that in the Ophir?

A. In some places three or four or five feet; it depends something on the size of the vein and the character of the ore and mineralization.

Q. That vein where it is found at about 33 or 34 feet in a small vein, is it not?

A. Yes sir.
Q. About how thick?
A. These walls come very close together; I think the walls are not over a few inches apart and probably in some places right close together.
Q. That is from 34 feet down?
A. Yes sir.
Q. Did you measure the distance from the top of the shaft to where you get to the walls of that vein?
A. Yes sir, I saw that; I laid one end of the tape on that and somebody else held the other, Mr. Darby or Mr. Moore or some one else, on the surface.
Q. What distance did you make it?
A. I believe it is 33 or 34 feet; I kept that in my head; I think it is 34 or 33.
Q. There you come upon a well-defined crevice with two walls close together?
A. Yes sir.
Q. Filled with mineral that is entirely different from the country rock?
A. The mineral lies outside of what you call the walls, and when you get to the bottom there comes in another line which is mineralized about from eight to ten inches.
Q. At about 34 feet you come to the crevice do you not?
A. Yes sir.
Q. That has two distinct walls?
A Yes, close together.
Q. But don't those walls open out as you go down?
A. They do, some, yes, in some places; not very much.
482 Q. How far are they apart at the 34-foot point?
A. I think they are very close together.
Q. Are they not a couple of inches apart?
A. Yes, they are hardly that far, I don't think, on an average at that point.
Q. As you go down the shaft you first come to the hanging wall, do you not?
A. There would be a hanging wall if it were not broken away, yes.
Q. As the shaft was sunk it approached the hanging wall first?
A. Yes sir.
Q. Then the crevice, if there was one at that point?
A. Yes sir.
Q. And then you strike the foot-wall?
A. Yes sir.
Q. Now in between those two walls is a vein filling there, is there not?
A. Well, those walls get so close together there that it is pretty hard to distinguish the filling very much.
Q. Can't you see that crevice and the ore of a different color with the eye from the practical bottom of the shaft where it goes out, and goes out of the shaft at 34 feet?

A. Yes, you can see the mineral and the different character of the minerals and breccia; but as to the distinction of saying that there was gangue matter between those walls, I don't think so.

Q. Isn't that colored streak of mineral that you see with the eye from the bottom of the shaft to 34 feet from the surface, isn't that between walls?

A. Yes sir, you might say it was between walls, but you would have to draw it down pretty close to describe how the walls were—how far apart etc., because they are very close in places.

Q. The walls properly mark the veins so far as the color, the difference in color of the rock?

A. Yes sir.

483 Q. This impregnation of mineral, into the country rock has the effect of making the rock harder, doesn't it?

A. It hardens it, yes.

Q. Is that more likely to be characteristic of the foot-wall or the hanging wall?

A. I don't think there is any differenee.

Q. Where a vein is dipping as this does, mineral being the harder substance than the country rock isn't the tendency for mineral to sink into the foot-wall rather than the hanging wall?

A. I don't think there is any difference in the walls there as to the character of mineral; that is the hardening of the walls; that has been my experience in cutting through them; we can tell when we approach a vein, even with a machine drill, by the hardening of the breccia.

Q. You stated in answer to a question by the other side, that if there were 16 assays taken out of these crevices in the Tecumseh discovery shaft, taken from different points, and six of them ran appreciable quantities of mineral and the others didn't as to whether you would call it a vein; I believe you stated that you would not?

A. I don't think that would be sufficient evidence of a vein close to the surface; these planes carry mineral down from the surface quite deep, assays might be taken from these planes that cross these perpendicular points.

Q. Wouldn't that be better evidence of a vein than going to some rock that was a little harder than the other?

A. Assay values would be better evidence to me than the hardening of the rock.

Q. Isn't there considerable difference in the hardness of porphyry?

A. Yes sir.

Q. Irrespective of whether there is gold in it or not?

484 A. I don't think the gold has anything to do with it particularly.

Q. What is it that hardens the porphyry?

A. It is the influence I suppose of the solution from the crevice and it turns so that it is almost quartz.

Q. The more silica there is the harder the porphyry?

A. Yes sir.

Q. That don't depend at all on whether there is gold there or not or silver?

A. I don't think it is necessary to conclude, because it is hard, that it is carrying gold or silver.

Q. Let me state a little different picture from that drawn by Mr. Thomas: Suppose that assayers go and take with their own hands out of these crevices material that is quartz and aim to get a fair representation of the shaft; they take samples from 16 different places in these crevices and out of six samples they obtain assays from a little over one dollar to four forty, and the others run a trace; would you not pronounce that a vein, a discovery sufficient to locate upon and wouldn't you locate upon that kind of a discovery?

A. The assays I would consider evidence of a vein, and if I were getting them along as I say I would consider I had a prospect that would justify me in continuing work on it.

Q. Wouldn't you consider you had a prospect that you were justified in locating?

A. Yes, I think I would.

Q. Wouldn't you feel that you had discovered a vein in the sense of the law, fairly and honestly discovered a vein?

A. I would not be satisfied until I got those assays quite a little ways from the surface; those sometimes will mineralize all the way down for seven or eight or ten feet, but I would not be satisfied that I had a vein unless it would assay on down deeper, within twelve or fifteen feet, although I might believe it sufficient to make
485 a location.

Q. That shaft is 38 feet deep?

A. I know it.

Q. We are not talking about a shaft 12 or 15 feet deep?

A. Of course I know nothing about the assays of those shafts, either one; while we took some I know nothing about the assays except what little testimony I heard here awhile ago.

Q. Wouldn't you at once conclude that you had a valid discovery of a vein if you found quartz in those crevices that assayed as high as four dollars?

A. I would consider it very good evidence of a vein if I had quartz that assays up there.

Q. The crevices themselves are sufficiently regular and continuous if filled with mineral to be a vein, are they not?

A. They are parallel and continue up and down the depth of the shaft.

Q. You don't think if you discover all the evidences of a vein, the crevices and the mineral in it, that you have to explore it more than 38 feet to satisfy yourself that it is a vein?

A. No sir, of course not.

Redirect examination:

Q. If the four-forty assay was at a point 16 feet and another at $1.20 23 feet down and the balance of the shaft nothing but a trace with no quartz visible, would you call that a vein?

A. No, I would not.
Q. Did you see any quartz there?
A. I didn't see any quartz in that shaft at all; I didn't see any difference in what was around these little crevices than what was down all through it.

Q. From your experience can you say whether or not veins
486 on that hill have near the surface the same dip that they have further down?

A. That depends on the slope of the hill.
Q. Is it or not a fact that the Raven vein itself originally starts a little towards the east and then turns to the west?
Q. Most all the veins I have opened on the west slope of Raven hill and other places in the camp, towards the surface where the hill is steep and according to the incline of the hill, they will crowd the surface over so that they will leave the dip towards the slope of the hill; that is, they dip the opposite direction; they will crowd the apex down the hill by pushing the broken rock.
Q. The Raven mine is situated on the same slope with this?
A. Same slope.

Recross-examination:

Q. Does that feature exist above solid formation or below it?
A. It exists where it is commonly called solid formation; where the rock is practically in place yet has been moved to some extent; but I think a miner would claim his rock was in place, and it would show that it really belonged there although it had gone off down the hill.
Q. Doesn't this vein in the Ophir claim continue on a regular continuous dip so far as you can see it?
A. So far as you can see it, yes sir.

487 JAMES J. CONE, being first duly sworn on behalf of defendants, testified as follows:

Q. Are you one of the defendants is this case?
A. Yes sir.
Q. One of the claimants of the Ophir location?
A. Yes sir.
Q. Are you a citizen of the United States?
A. Yes sir.
Q. Native-born?
A. Yes sir.
Q. Of what State are you a native?
A. New York.
Q. Are you acquainted with Lyman Robison, your codefendant?
A. I am.
Q. Is he a citizen of the United States?
A. He is.
Q. Native-born?
A. Native-born.

Q. Where do you reside?
A. Canyon City and Anaconda.
Q. Spending a part of your time in each place?
A. Yes sir.
Q. What is your business?
A. I am a real-estate dealer in Canyon City and mining in Anaconda.
Q. You carry on both pursuits?
A. Yes sir.
Q. Are you the same James J. Cone who testified in a certain protest proceedings at the land office in Pueblo, in October, 1893, concerning this same location?
A. Yes sir.
Q. Prior to that time, that is. to your going to Pueblo, did you select, or cause to be selected, any material from the Ophir shaft for assay?
A. I did.
Q. By whom was it selected?
A. The rock was actually broken from the bottom of the shaft by my then foreman Mr. Vandenburg.
Q. In your presence?
A. In my presence.
Q. What did you do with these pieces of rock after they were broken?
A. I kept them by themselves, separate from other rock, took them to Mr. Doyle's assay office, asked him to make a careful assay of them, and be sure and keep them separate from any outside influence, to do the work himself, as I wanted him to make an affidavit as to the contents of the rock.
488
Q. Was that the same James A. Doyle who testified here today?
A. Yes sir.
Q. Did he, as a matter of fact, return an assay certificate to you of that ore?
A. He did.
Q. What was done with it?
A. It became a part of the record of the proceedings in the land office at Pueblo.
Q. Did you have more than one assay made at that time?
A. Only one.
Q. Prior to October, 1893, how long had you been engaged in mining?
A. I began the active supervision of mining in May, 1893.
Q. That was about five months before this time?
A. Yes sir.
Q. Did that period of time consist — the extent of your actual experience in contact with mines?
A. Yes sir.
Q. On what mines or mining locations, prior to October, 1893, had you been engaged in active work, if at all?
A. The only work that was done was on the Doctor and Chief.

Q. Are they anywhere in the vicinity of this property on the same hill?

A. Yes, about a quarter of a mile.

Q. Can you recall when work was resumed upon the Ophir after your visit to Pueblo, in October, 1893?

A. In the spring of 1895.

Q. I show you a contract marked Exhibit A 1, and ask you if you recognize that contract?

A. Yes sir, I drew it.

Q. Is that the contract under which work was resumed upon the property?

A. Yes sir.

Q. State whether or not you were able to find that contract at the last trial?

A. No sir.

Q. You found it since that time?

A. I found it since that time.

Q. By whom was the work done upon these premises under
489 that contract?

A. Peter Johnson and F. S. Mear.

Q. Did you or not, as a matter of fact, pay those men for cleaning out, as well as for sinking the shaft?

A. I paid them $7.50 for extra work before beginning the contract.

Q. Under what circumstances; why was that done?

A. I drew that contract, and left it to be signed under certain conditions with my foreman, Mr. Dahl, or my superintendent, and went home; after my departure they went to work cleaning out the shaft, and found a good deal more material in it than was anticipated, ice and snow, and complained that they ought not to pay for it, and when I came back, the matter was submitted to me, and I said, very well, I will pay them, and we settled on the sum of $7.50 that we paid for it.

Q. Did you pay for, or know, of any sinking of the shaft, actual breaking of the rock in the bottom of the shaft, between 1893 and 1895, when it was cleaned out, under this contract?

A. No sir.

Q. Between the time of your visit to Pueblo and the time of actual resumption of work on the Ophir, please tell the jury why work was not done?

A. In the years 1893 and 1894 the assessment-work was not required to be done; we were working under what I think was the Bell law; we were working the Chief, which was not proving very remunerative, until June, 1894, and after that time, owing to the strike in Cripple Creek, we discontinued work upon that, leaving us in debt; on the 7th of November, 1894, election day, we resumed work, but on the Doctor and not on the Chief, and it took until the spring after that before we took out ore enough out of the Doctor to pay our arrearages and indebtedness, and be in a position to carry on other work.

Q. That is to say, you were not able financially to work on the claims?

A. No sir.

Q. And you worked those which gave the best appearance of a profit?

A. Yes sir.

490 Q. Have either of those mines since proven profitable?

A. The Doctor has; the Chief never has paid any profit.

Q. When, on account of the ore in the Doctor, you squared up your obligations and got ahead, did you at once resume work on this property?

A. Yes sir.

Q. At the Pueblo hearing you testified in answer to a question that you had no vein in the Ophir; I wish you would tell the jury what you then understood to be implied in the use of the term vein or lode?

A. At that time I had the idea which has been expressed to this jury in my hearing a number of times during this trial, that a vein——

Plaintiff objects; objection sustained.

A. That a vein must consist of two walls, clearly visible to the eye, filled with mineralized matter of a higher value than the country rock.

Q. Of a commercial value?

A. Of a commercial value.

Q. Did you or not assume all of those elements that you have mentioned to be necessary to constitute a vein when you thus testified?

A. I did, sir.

Q. What has been your experience in the camp as to the existence and exposure in workings of mineral veins or bodies of ore with reference to the country rock; that is, as to similarity in appearance or otherwise?

A. It is very similar indeed.

Q. Has that been your experience in some of your other mines?

A. Yes sir.

Q. What do you understand by the term "ore frozen to the country rock" if there is such a term?

A. Where there is no line of demarkation visible between the ore and the country rock, and the only way you can get it off is to moil it off, or chisel it off.

491 Q. Or blast it off?

A. Or blast it off; it is regarded as frozen to the country rock.

Q. You did at that hearing, did you not, introduce this assay certificate?

A. I did.

Q. Of which you speak?

A. Yes sir.

Q. Is it or not a fact that in the development of the Doctor you

were in pay ore some time before being actually aware of the fact by reason of those conditions?

A. Yes, sir; from the spring of 1893, until November, 1894, we had ten-ounce ore in sight and didn't know it.

Q. Is there anything in the texture or appearance of the rock which caused that?

A. It resembled the country rock

Q. Under those circumstances how do you determine the difference?

A. By assay.

Q. What, if anything do you know about the doing of any work on the Ophir mine in 1896?

A. There was an assessment worked upon it in 1899.

Q. What do you mean by that?

A. About $130 worth of work; I can't tell you the exact figure.

Q. Was there any ore taken from the mine and left on the dump?

A. Yes sir.

Q. *By* you know what became of it?

A. I know it was taken by somebody, removed from the dump.

Q. Do you know about when that was?

A. I don't know the date of its removal, no sir; but we missed it.

Q. Do you know personally the extent of that working and its value in 1896?

A. I don't know the number of feet, no sir.

Q. Do you know how much you paid for it?

A. I know that I paid in the neighborhood of $130 for it.

Q. More than $100?

A. Yes sir.

492 Q. Do you know whether in the sinking of the shaft upon the Ophir after work began in June 1895, any ore was saved and shipped?

A. When I returned from my home in Canyon City, at the time this contract was signed, there had been I think, one day's work done on the Ophir shaft, and at the close of that day samples of rock were brought to our cabin in Anaconda, said to have come from the bottom of that shaft.

Q, Samples of ore?

A. Samples of ore.

Q. Was any ore shipped and sold from the Ophir?

A. Yes sir, after the commencement of that shaft.

Q. Do you know how much?

A. We shipped one car-load.

Q. Do you remember what you received for it?

A. It was somewhere between fifty and sixty dollars; my recollection is that it was $53 and some cents, in addition to $15 charged for treatment and freight; that was for the car.

Q. That was in addition to the ore that you say was taken out in 1896?

A. Yes sir.

Q. Do you know anything about the time when the Tecumseh discovery shaft was begun?

A. I don't know just when it was begun, no sir.
Q. Were you at the shaft at any time during the process of sinking?
A. Yes sir.
Q. With whom?
A. With my superintendent, Mr. Dahl.
Q. About what time was that?
A. It was after the Florence and Cripple Creek railroad had been built to Wilbur, but was not continued into the camp. I came up on the road to Wilbur, taking the stage up as far as Arequa, and my superintendent met me, expecting me at Arequa, and we walked over the hill, and in going over, we passed the Tecumseh shaft.

493 Q. Did you at that time prepare any notice and stick up on the shaft?
A. I did, sir.
Q. What sort of a notice was it?
A. A notice that the property belonged to Cone and Robison, and warning all parties to desist from work there, notifying them that if they worked there they worked at their peril.
Q. What did you do with that notice?
A. Stuck it on a support to the windlass on the south side of the shaft, the southerly side.
Q. Was there anybody working there at the time?
A. They had gone to their supper; it was after the four o'clock shift.
Q. Did you take notice of the approximate depth of the shaft at that time?
A. I did, and my memory in regard to it is that it was considerable deeper than the evidence shows that it was at that time.
Q. You got an idea that it was more than 38 feet deep?
A. Yes, my recollection is that it was 40 or 45 feet deep at that time, but the testimony shows that it was only about 20 or 25.
Q. What, if anything, do you know about the doing of the work upon the claim in 1897, the assessment-work?
A. In 1897 I paid for labor in December $90, and for two days' work of my shift boss at $4 a day, $8, besides the powder and fuse and steel and candles that were used in working the assessment; I also paid in January for three shifts of two men each, making $18 additional.
Q. Have you any knowledge of the approximate value of the candles, powder and fuse used?
A. We estimated it at about $1.50 a day for two men.
Q. Is that a fair estimate?
A. Yes sir, I think that is a fair estimate.

494 Cross-examined by General JOHNSON:

Q. What was the aggregate amount you paid for that work in 1897?
A. $116, besides the material used.
Q. You hired this gentleman who was a witness in this case, to do this work, did you?

A. In 1897?
Q. Yes?
A. Mr. Skipworth?
Q. Yes?
A. Yes sir.
Q. Didn't you go to see how much work he was doing?
A. I was at the shaft; I didn't go into it.
Q. Were you entirely indifferent as to how much work they did there?
A. No sir.
Q. Just so that you paid them over $100?
A. I had a thorough superintendent whom I knew would see that they did all the work that was necessary.
Q. If they only did seven or eight feet of work, you paid rather too much, didn't you?
A. That depends a good deal on the character of the rock that is broken; some of the rock on that hill is very difficult to break.
Q. You paid Johnson $7.00 a foot for sinking there, didn't you?
A. Yes sir.
Q. The same kind of rock, was it?
A. I don't know that it was.
Q. I put it in the form of a question, whether it was about the same as the drift?
A. I don't know that it was.
Q. Was it or was it not, in your opinion, about the same kind of rock?
A. I say I have no knowledge on the subject; I know Johnson and Mears did not make any money out of the contract.
Q. What was the reasonable value of 8 feet of work, drifting in that drift, and hoisting the same amount that was broken down; can't you readily let contracts for seven or eight dollars a foot?
495 A. I don't think so, no sir.
Q. What would be the reasonable value of it?
A. That would depend entirely on the character of the rock.
Q. Don't you know in your own mine there, your own shaft, what the rock is?
A. I never was in the Ophir shaft in my life.
Q. So you have no opinion as to what a fair contract would be for doing a certain number of feet on that claim?
A. Not from my own personal observation.
Q. You did no other work on the claim in 1897 except this that was done by Mr. Skipworth, did you?
A. I think not, except the work that we did at the time we prepared it for examination; nothing in the line of development.
Q. Commencing back in 1893, you did no work on the Ophir in that year, did you?
A. In 1893, no sir.
Q. Did you do any work in 1894?
A. No sir.
Q. Did you do any work in 1895 until this work that was done under contract by Johnson?

A. No sir.
Q. How much was done that year?
A. In 1895?
Q. Yes sir.
A. About $260 or $270 worth; I don't recollect the exact amount.
Q. You sunk this shaft down to 70 feet?
A. Later in the year we did some more cuts; we did drifting from the bottom of the shaft; that was done by day's work.
Q. I am speaking of the whole year?
A. I can't tell you how much it was; I kept no separate account of the day's work that was done; that went into my regular monthly expenses for the men.
Q. Don't you know that you sunk the shaft down to 70 feet and run a drift of about 40 feet?
A. Yes sir.
Q. And then quit work?
A. Yes sir.
Q. And you took everything off of there, didn't you, in the way of machinery?
A. We had no machinery on it; we took a rope, a wind-
496 lass and bucket.
Q. You say that in 1895 you shipped some ore?
A. Yes sir.
Q. And you got a profit of $53; that is to say, a return of $53; that was not paying, was it? It didn't pay for the work, did it?
A. I don't think it did, no sir.
Q. Didn't you quit work there either because the mine was not paying, or because of the decisions of the Secretary of the Interior?
A. If you will allow me to answer as to what we did actually stop for——
Q. That is what I am trying to find out?
A. We stopped it because the mine was not paying.
Q. And that was in 1895, was it?
A. That was in 1895.
Q. In 1896 you say you paid over $100 for work?
A. Yes sir.
Q. But you don't know how much was done?
A. I knew at the time, but I can't tell you now how much was done.
Q. Do you know where it was done?
A. I know it was done in a drift north of the shaft.
Q. That work was done in a drift of the Tecumseh, was it not?
A. It was done on the Ophir property.
Q. Will you answer my question, please?
A. No sir, not in that way, I won't.
Q. Then I ask the court to compel you to?
A. I don't know any Tecumseh property there.
Q. You know of an Ophir?
A. I know the Ophir, yes.
Q. You haven't got a patent for it, have you?

A. Not yet, no sir; I hope to have one.

Q. You came in under the Tecumseh shaft No. 4, and into a drift made by the Tecumseh people from that shaft, and went on north to the breast of that drift to do your assessment-work of 1896, didn't you?

A. Yes sir.

497 Q. And you don't know how many feet of work was done that year?

A. I haven't any present recollection of the number of feet, no sir.

Q. Then in 1897 you did the work you have spoken of?

A. Yes sir.

Q. And that *it* all the work that has ever been done on that property—on the Ophir?

A. The work that has been counted after the discovery work, yes; that is all the work that has ever been done by us.

Q. You have practically never done more that what would be an assessment-work since 1893, have you, on that property?

A. Yes, we have done more than that.

Q. In the last two years you have simply done the least that you possibly could do for assessment-work?

A. We have done the assessment-work simply.

Q. You haven't aimed to do anything but assessment-work, have you?

A. No sir.

Q. It hasn't been for want of funds, has it?

A. No sir.

Q. So far as money was concerned you were amply able to commence soon after striking mineral in the Doctor to work the Ophir as much as you pleased?

A. After we got our debts paid, yes.

Q. You paid your debts pretty soon, didn't you?

A. We did some, the next spring of 1895.

Q. You have taken a large amount of money out of the Doctor, haven't you?

A. We have since then, yes; our lar*he* shipments began in August, 1895, on the Doctor.

Q. That is the year that you quit this work on the Ophir, because it was not paying?

A. Yes sir.

Q. The Doctor was a great shipper during that summer wasn't it?

A. Yes sir.

Q. And the next year?

A. And the next year.

Q. And the next after that?

A. And the next after that.

Q. And is yet?

498 A. We shipped some ore.

Q. Then your excuse for not working that property only applies to 1893 and 1894?

A. It applies up to 1895, up to the time we commenced work.

Q. You were able in 1893 to survey the Doctor and Chief, and Julia E. and the Ophir for a patent, and pay for the land, were you not?

A. They were surveyed in 1892.

Q. For patent, all of them?

A. Yes sir.

Q. But you did not pay for this land until 1893, did you?

A. I don't recollect the date of the receiver's receipt.

Q. You had the money to do that?

A. I certainly did; I paid for it.

Q. You were applying for a patent for the Doctor, the Chief and the Julia E. at the same time that you applied for a patent on the Ophir?

A. Yes sir.

Q. Now at the time of the application for that patent, you examined the Ophir property to see what there was on it, didn't you?

A. I examined it in the fall of 1892, August or September.

Q. And then you surveyed for patent?

A. I can't tell you the date of the survey; I didn't have charge of the application for patent; we had a manager at that time, Mr. Henry E. Smith, who had charge of the application for patent.

Q. When did you buy the claim?

A. Some time in 1892; my impression is that it was in May or June of 1892.

Q. How deep was that discovery shaft when you bought it?

A. As in the case of the Tecumseh, I thought it was deeper than it really was; I thought at the time it was about 12 feet deep; I only know from the testimony; I didn't measure it, that it was 10 feet.

Q. Didn't you testify it was 10 feet when you bought it?

499 A. I testified to that.

Q. Didn't you testify that the shaft was ten feet deep when you bought it?

A. I don't recollect; I think it was 10 feet when I bought it.

Q. And that you sunk the other 15 feet?

A. It was sunk before that; I think the other 15 feet was sunk before we bought it, but I won't be sure about that.

Q. Think about that.

A. Thinking won't help me any, because the vein matter on Raven hill at that time was not considered of as much value as it is now. The actual value of the Ophir claim was not considered very great at that time, and not so much attention was paid to it.

Q. Didn't you testify at Pueblo that that shaft was 25 feet deep, and that it was sunk 10 feet by your grantor, and the other 15 by yourself and partner?

A. Possibly I may; I don't say now but what we paid for the sinking of the other 15 feet.

Q. Then you applied for patent?

A. Yes sir.

Q. On that 25-foot hole?

A. With the understanding that sufficient work should be done as was necessary for a patent.

Q. You didn't do any more work until after you applied for a patent?

A. There was more work reported to me that was done on that property after the original application for a patent was made, and before the proof of $500 worth of work.

Q. You don't claim there was any more work done on the discovery shaft?

A. Below 25 feet that I testified to then?

Q. Yes sir.

A. No sir.

Q. After you had applied for a patent do you remember the date of that application?

A. I do not.

Q. There was a protest filed against that?

500 A. After we had our receiver's receipt, yes; it was about time for us to get a patent.

Q. You had made your proof of $500 worth of work?

A. Yes sir.

Q. Do you know of any work done by you or your grantors on that claim other than the 25 feet?

A. I supposed there was a considerable amount of work done aside from that; I want you to understand I did not make the application for patent personally; I was simply an owner that had an interest in the property at that time.

Q. It was made in your name?

A. It was made in my name, yes.

Q. It was made by those who represented you?

A. Yes sir, it was made by Mr. Henry E. Smith.

Q. You knew they had to show $500 worth of work?

A. Yes sir.

Q. And you knew they had to make a showing that they had discovered a vein?

A. Yes sir.

Q. You knew that that was the act of Congress and the law of this State?

A. I didn't know that they had to show the discovery of a vein in my understanding of what a vein was; I knew they had to show mineral in the shaft.

Q. Now that protest was heard, was it not, at Pueblo, on October 11th?

A. Yes sir, it was.

Q. In order to testify on that hearing and sustain your application for a patent, if you could, you went to the Ophir shaft a few days before that and examined it, didn't you?

A. Yes sir.

Q. How deep did you find it?

A. I measured it 25 feet.

Q. Who helped you?

A. My superintendent, Mr. A. Vandenburg.

How did you measure it?
With a tapeline.
Did you intend to measure it accurately?
I did, sir.
It was for your interest to show that that shaft was as deep as could, wasn't it?
No sir, it was not for my interest to show only what the depth of it was, exactly.
Q. Wasn't one of the objections to your patent that you hadn't done $500 worth of work?
. Yes sir.
. And wasn't another objection that you hadn't discovered eral?
. Yes sir.
. Then it was for your interest to show as much work as possi- wasn't it?
. No sir.
. That is, as much as was the fact?
. No sir, it is not for my interest to show anything that did not t.
. Didn't your interest lie in the direction of showing that that t was as deep as you could show it truthfully?
. Yes sir.
. And it was also for your interest to show that there was a vein hat shaft if it was the truth?
. That there was mineral in the shaft, yes.
. Therefore you would not have made it any shallower than it ly was to subserve any purpose of your interest, would you?
. No sir, I believed that that shaft was 25 feet deep.
. At that time?
. At that time.
. And there was no work done on it from that day until 1895?
. No sir.
. You testified to that fact at Pueblo, didn't you?
. I did, sir.
. That you measured it with a tapeline, assisted by your super- endent, and found it 25 feet deep?
. Yes sir.
. There was no conflict at that time between you, Mr. Bridge and . Hoenshell, who testified on the other side?
. No material conflict.
. The most conflict there was two inches?
. A few inches, I don't recollect exactly.
. Isn't it a fact that two of you, who saw it just before that hearing, placed it at 25 feet, and the other made it two inches 2 less?
A. I think that is true.
. You also testified there as you do now, I believe, that you had ne no work in 1893?
. Yes sir.

Q. And I believe you said that at that time you had no intention with reference to the development of the property?

A. No present intention, no.

Q. Did you know about an application being made for an injunction in this case?

A. You mean in 1897?

Q. Yes, it was last spring some time?

A. Yes sir.

Q. You made an affidavit on that occasion, didn't you?

A. I think I did.

Q. You knew that Mr. Dahl made an affidavit, didn't you?

A. I did.

Q. Were you present at that hearing?

A. What hearing?

Q. Of that application?

A. No sir.

Q. Did you know what Mr. Dahl's affidavit contained?

A. I do know now, because I heard it read here.

Q. Did you at that time?

A. At the time of the hearing?

Q. Yes, or at any time before?

A. Not before the hearing, I didn't; if you will allow me to tell you, I will tell you just how those affidavits came.

Q. I have no objections?

A. I went up from Canyon City to Anaconda, and reached there at about five o'clock in the evening, was met at or near the Florence & Cripple Creek depot by Mr. Lee, who told me that my affidavit was needed in the application for injunction, which I knew was being made; I walked directly over to Justice Smith's office, the affidavit was drawn for me, and at that time I read it over, signed it and swore to it, picked up my grip and went to the house, and I saw no other affidavit.

503 Q. Were you surprised when that shaft was cleaned out and measured 28 feet?

A. It didn't correspond with my measurement.

Q. 3 feet of difference in a shaft in that distance is quite a discrepancy, isn't it?

A. Yes, if it sinks itself, it is.

Q. Can you explain that at all?

A. I cannot explain it; it is inexplicable to me.

Q. Isn't it explained this way: That these men before they took the contract, before it was measured up, that they sunk it deeper?

A. No sir, they didn't sink it an inch.

Q. Then it must have been 28 feet when you measured it?

A. That is possible; I have made as grievous errors as that before.

Q. You have?

A. Yes, I have in measurements.

Q. When and where?

A. Often in my life.

Q. Do you mean to be understood as saying that you could not measure a distance of 25 feet and get it within 3 feet?

A. No sir, I don't mean any such thing; I am a careful man, ordinarily.

Q. Then you paid these men $7.50 in money, didn't you?

A. I paid them $7.50 for cleaning out the shaft.

Q. But your written contract required them to clean it out without expense?

A. I explained when you were out of the room how that came.

Q. I have got a note of it; isn't it a fact that they came and represented that they had done something more than clean it out; that they had been at work there two days?

A. No sir; I have told you the literal truth as to that $7.50 and their cleaning out the shaft. I was sorry for them; I knew they were going to make no money.

Q. Might you not be mistaken about that as well as missing the depth of that shaft 3 feet?

A. No, I don't know that I did miss it three feet; I tell you that is inexplicable to me.

504 Q. At the time you went to that shaft in 1893, who did you take along with you?

A. You mean the first time I went there when I took samples?

A. Yes sir.

Q. I took my superintendent, Mr. A. Vandenburg.

Q. Did you go down in the shaft?

A. I did not; I never was in the shaft.

Q. Did he go down?

A. He did.

Q. Where did you get the rock from that you had assayed?

A. From the bottom, and the four sides near the bottom of the shaft.

Q. How many samples?

A. I think we had about eight samples; that is my recollection, although I would not swear positively as to the number.

Q. Did you give an account of more than one?

A. How do you mean, give an account?

Q. In testifying on that occasion?

A. At what time—before the Land Office?

Q. Yes.

A. If I told anything about it, I said I had more than one.

Q. Did you produce more than one assay?

A. Only one assay.

Q. What did the other assays run?

A. There were no other assays.

Q. Then you didn't have but one sample, really, that did assay?

A. Yes sir; I thought you asked me how many pieces of rock I took.

Q. No, I said samples.

A. They were samples from the bottom of the vein, each one was a separate sample.

Q. Then they were all put together, were they?

A. Then they were all put together, and crushed together, and this was an average.

Q. Where is that man who gathered up that rock?

A. He is in the Cripple Creep camp.

505 Q. Of course you could not say exactly what rock he took?

A. I could see very well.

Q. You simply had assays of such rock as he gave you?

A. I told him, sitting on the edge of the shaft——

Q. Not what you told him.

A. Well, he took samples from the bottom of the shaft as I directed him.

Q. In measuring this shaft you had a tapeline?

A. Yes sir.

Q. He held it below and you held it above?

A. Yes sir.

Q. And you agreed on its being 25 feet deep?

A. I had the measurement on the tape.

Q. You spoke of some ore that you mined there in doing the assessment-work in 1896, being taken away by some one?

A. Yes sir.

Q. Why didn't you take it away?

A. That is a hard question to answer; I couldn't tell you; if I had been the sheriff I would.

Q. You didn't consider it of much value, did you?

A. You don't want me to tell why I didn't take it away?

Q. Yes, I do?

A. Do you?

Q. Yes?

A. Because I didn't think there was anybody there that would take my ore.

Q. Before that ore was taken away the Secretary of the Interior had said that you had no right there, hadn't he?

A. I don't know that he had. I don't know when it was taken away, and I cannot give you the date of his decision.

Q. You didn't consider that ore of very much value, did you?

A. I considered it of sufficient value to pay for taking it away.

Q. Why didn't you keep on working then?

A. Because it was not of sufficient value to make the mine profitable at that time.

Q. Isn't it a fact that as the mine was not paying, all you cared to do was the assessment-work; you didn't want to risk any

506 other party on that property?

A. I cannot give you my trend of reasoning in regard to it; I stopped work there because it was not paying me.

Q. You had plenty of money to work?

A. I had plenty of money, yes.

Q. And still you were figuring on simply doing just your margin of assessment-work, holding on by assessment, while you knew these other parties were making and developing and working a mine?

A. These other parties didn't do their work to amount to anything until 1897.

Q. They sunk three shafts there in 1894, didn't they, that exposed veins?

A. I don't know that they exposed veins; I never have seen any veins in them; I have heard testimony that they exposed veins.

Q. You knew that they sunk these three shafts in 1894, that have been spoken of, didn't you?

A. I think I did, or at the time they were sunk, if they were sunk in 1894; I think they were not sunk in 1894, though; I think they were sunk in 1895.

Q. You knew they commenced this deep shaft, this shaft No. 4, in the fall of 1895, and were continuing on there and doing hundreds of feet of development work, didn't you?

A. I don't know how much development work they were doing; I knew they had quite a dump.

Q. You knew they were working there constantly in mining and developing a mine, while you were simply doing assessment-work, didn't you?

A. I know they didn't do any such thing; they did hardly any work in 1896.

Q. In 1897 then—in the latter part of 1897?

A. In 1897 they did some of that work.

Q. And you waited until the last days of 1897 before you did anything; wasn't that work going on in July, 1896, commencing in the fall of 1895, and running all through 1896, and didn't
507 you get that injunction and stop our working early in 1897?

A. We got the injunction some time, I think, in May, 1897.

Q. Were there not several hundred feet of development work done on the Tecumseh in 1896?

A. It is possible that I have confounded 1895 and 1896; either in 1895 or 1896 the Tecumseh people did very little work; I can't tell which year it was; it is possible it was in 1895.

Q. I will ask you this question, as to whether your entire conduct for the last five years, in trying to hold onto that property, and do nothing more practically than assessment-work, has not been based on the knowledge and belief and conviction in your mind that you did not have a discovery that antedated ours?

A. I have always known we did have a discovery.

Q. Did you swear to it in 1893?

A. Yes sir.

Q. We will see about that; did you testify as follows, and afterwards sign your name to it, after it was read over to you carefully: "Q. Who sunk the shaft that has been spoken of in the testimony today of Mr. Bridge and Mr. Hoenshell? A. 11 feet of it by my grantors; 14 feet of it by myself and partner. Q. What is its depth? A. 25 feet. Q. Measured where and how? A. Measured from the bottom of the shaft to the top of the shaft by a tapeline. Q. When? A. On Wednesday of last week. Q. By yourself? A. By myself and my foreman." You testified to that, did you?

A. I did, sir.

Q. "Have you made an examination of the 25-foot shaft afore-

said on this Ophir lode, with reference to there being a vein, lode, ledge or deposit of mineral-bearing gold or silver, or gold and silver? A. I have made a test, but only for gold. Q. What is the character of the rock in which this shaft is sunk? A. Porphyry.

508 Q. Any crevice in the shaft? A. Yes sir. Q. State whether or not there is anything in that shaft that you call a wall? A. The west side at the bottom of the shaft for about two or three feet is about an average Cripple Creek hanging wall." Is that correct?

A. Yes sir, that was a porphyry slip at that time. The average walls in Cripple Creek with the development as far as I have had an opportunity to examine them, resemble very much the slips of the porphyry—the porphyry slip on the west side of the shaft.

Q. That was the only place at that time that you stated you had any vein, wasn't it?

A. Yes sir, and I was not at all sure that there was one there.

Q. You spoke of it as a slip that might perhaps develop into a vein?

A. Might perhaps be the wall of the vein.

Q. It might?

A. Yes sir.

Q. And now the vein that you are contending for—the vein that you subsequently discovered, is entirely on the other side of the shaft from that slip?

A. Yes sir.

Q. In the diagonal corner across it?

A. Yes, it is in the opposite side; it is shown partially across the west side of the shaft.

Q. It is across the longest way of the shaft?

A. Yes sir.

"Q. Describe what that is like? A. It is like the ordinary country rock, slightly stained porphyry. Q. Is that such a wall as being found in a shaft or excavation in that mining district, as will lead the ordinary Cripple Creek miner to work further or to continue work for the purpose of extracting mineral? A. Not unless he had some indications of mineral in place. Q. But if he had indications of mineral, then what? A. Always follow a porphyry slip in Cripple Creek."

A. If you have mineral, put the two together.

509 Q. That was the only thing that you had seen or heard of at that time in that shaft, that you thought was any indication of the existence of a vein—that porphyry slip?

A. No sir, that is not so.

Q. Did you describe anything else here as indicating the proximity of a vein?

A. I described something indicating the proximity of mineral.

Q. You had your assays?

A. I had my assays all the way down.

Q. That is what you referred to?

A. Yes sir.

Q. "Q. What were the indications in that shaft adjoining that

which you termed a hanging wall, as to there being mineral there? A. For the last three or four feet of the shaft, the whole bottom of it had been considerably stained with iron, which is an indication in that camp sometimes, of an approach of mineral. Q. Q. Have you ever found another wall than that hanging wall in that claim? A. Never. Q. Which way of the shaft does this hanging wall extend? A. It runs lengthways of the shaft. Q. Have you ever crosscut from that wall? A. Never. Q. What is the condition in that immediate vicinity, in that same character of rock, porphyry, as to their being walls, containing veins, lodes, ledges or deposits of a different character of rock than the porphyry, which constitutes the walls? A. In that particular vicinity the veins are almost without exception composed of porphyry which carries the value sometimes as high as $1,000 or $2,000 per ton." All your testimony that I have read so far was given on direct examination, by your own attorney, wasn't it?

A. I can't tell you; you have got the record there.

Q. On cross-examination didn't you give this testimony: "Have you got a vein in the Ophir? A. No. Q. Is there any cer-
510 tainty that the rock that is in the bottom of the Ophir shaft is any part of a wall to a vein? A. No. Q. Does not the country rock porphyry in the Cripple Creek mining district generally assay gold? A. Yes."

Q. There is a little more of this testimony you would like to read: "Q. What would be the distinction between the hanging porphyry wall and the porphyry vein? A. The porphyry vein would carry mineral while the wall would be comparatively barren. Q. Would the formation be continuous and solid, or would there be a line of demarkation between the wall and the vein? A. The vein would be likely to come against the porphyry slip, which would show a line of demarkation."

Q. Haven't you here before this, in your testimony, and wasn't it your claim at Pueblo, where you answered that question about a vein, just the same as it is here today—that there could be a vein, an invisible thing that you could not tell except by assaying, and that you could not tell when you were on it or off of it except by assaying—that there was no line of demarkation, and that the walls were porphyry, and the vein filling porphyry, and it all looked alike—wasn't that your theory then the same as it is today?

A. I think my theory then was that where there was a deposit of mineral clearly defined that it was a vein, so united to the walls that it was difficult to find any line of separation between the two; my reason for it was that we had men at work there with chisels, cutting off just exactly that kind of ore from the wall.

Q. Before that time?

A. Before that time.

Q. "Q. Would the formation be continuous and solid, or would there be a line of demarkation between the wall and the vein? A. The vein would be likely to come against the porphyry slip, which would show a line of demarkation. Q. Have you in the Ophir shaft passed through any hanging wall into a porphyry vein? A.

Unless the present slip at the bottom of the Ophir shaft is a
511 wall, we have not. Q. Where is that supposed slip with reference to the bottom of the shaft? A. About the last three feet on the west side of the shaft. Q. Describe that supposed slip? A. It is simply a comparatively smooth wall of porphyry. Q. And which way does the surface run? A. It runs lengthways of the shaft. Q. If that is a wall of any vein, is it the hanging or foot-wall? A. It is presumably the hanging wall. Q. Have you made any explorations for the foot-wall? A. No. Q. What is there to separate that wall from the adjoining rock? A. The adjoining rock is taken away so I can't tell you. Q. Then you have not worked in this shaft while the sinking was being done? A. No sir, never worked there. Q. Do you know that the rock that has been taken away from one side of this slip, as you call it, is any different from the rock on the other side? A. No sir, I do not know that it is; may be identical; I don't know that it is a wall at all. Q. If you had any reason to suppose that is a wall of a vein, why have you not made some explorations to discover the other wall? A. We have had too much work to do and too little money. Q. This slip that you speak of is upon which side of the shaft? A. West. Q. The west side of the shaft then, is now formed by the fact of this porphyry slip? A. Yes."

Q. I believe you said you went to the Tecumseh discovery shaft some time in 1894 and put up a notice?

A. Yes sir.

Q. You saw the discovery notice there of the Tecumseh?

A. I did not, sir.

Q. Didn't you see a notice there?

A. I don't think there was any notice there at that time.

Q. Didn't you testify before that you saw a notice there?

A. I couldn't tell you; I am giving you my present recollection.

512 Q. Do you say there was not a notice there at that time?

A. I say I have no recollection of there being a notice there at that time; I don't think there was any there.

Q. Is your recollection better now than it was last spring, when you testified?

A. No sir.

Q. Didn't you see the name of Joseph H. Beals on that notice?

A. As I have testified, I don't think there was any.

Q. On some notice there?

A. I don't think there was any notice there of any kind.

Q. You knew who the people were who were contesting there, and doing that work, didn't you?

A. I did not.

Q. You didn't know who the people were who were claiming the Tecumseh claim?

A. I know the evidence produced showed who they were.

Q. That was in 1893, wasn't it?

A. Yes sir.

Q. This hearing at Pueblo had taken place in October, 1893, had it not?

A. Yes sir.

Q. And it was the spring of 1894 that you put up the notice?

A. Somewhere in 1894.

Q. Then you knew who were contesting there?

A. I knew who were contesting against the Ophir, but I didn't know that those were the parties who had sunk that shaft.

Q. You did not?

A. No sir, that was the first time I ever saw that shaft, when we went across the hill there.

Q. Do you say in 1894, when those three shafts were being sunk there on the Tecumseh, that you didn't know that they were being sunk by the Tecumseh people?

A. This was below the Ophir on the hill—southwest of it.

Q. It was within the boundaries?

A. Of the Ophir claim? Yes.

Q. And also of the Tecumseh?

A. I didn't know where the boundaries of the Tecumseh

513 claim were.

Q. Didn't you ever see any of the stakes?

A. I never saw a Tecumseh stake in my life except in the latter part of 1892 or 1893.

Q. Did you testify this way last spring in the former trial of this case: "Had this Tecumseh claim been located at the time you put your notice there? A. That I cannot tell you; I think it had. Q. You saw a notice up there, didn't you? A. I am not positive; I saw the notice at one time, but I can't identify it with this time. Q. It was this present discovery shaft that you posted your notice at? A. Yes sir. Q. It was where work was being done, or had just been done? A. Where work was being done; the windlass and rope and buckets and everything were there. Q. You saw some kind of a notice up there? A. At that time? Q. Yes. A. I can't remember that I did. Q. How soon afterwards did you? A. I couldn't tell you that from recollection. Q. Isn't it your recollection that you saw the ordinary notice that is put up at such places there some time? A. I have a recollection of seeing the location notice of the Tecumseh at some time on that claim. Q. And you read it, didn't you, at the time you noticed it? A. I have no present recollection of reading it; but I presume I did; I would naturally, yes. Q. You either read it or assumed that it was an ordinary location notice that miners put up, didn't you? A. Yes sir."

A. I say the same thing now; I say that at the time I went there I have no recollection of seeing the notice at the Tecumseh shaft at the time I put up a notice there.

514 Q. While you were hunting notices, and knowing that in 1894 and 1895 and 1896 and 1897, up to the time of this trial last spring, having reason to suppose that the Tecumseh people were going on and expending a large amount of money in the development of the Tecumseh claim, why didn't you give them notice that your former testimony about that Ophir shaft was a mistake?

A. There were two reasons for it: In the first place, I didn't consider that anything else beyond the notice which I had already given was necessary; I believed that the Tecumseh people knew perfectly well that they were undertaking to take our ground away from us—that they were not working in the dark, and in addition to that, one of the Tecumseh people came to Mr. Robison and I in Canyon City with an effort to settle this matter; I will say in connection with that that I never knew he had any connection with the Tecumseh working at all until since this trial; that was the first time I ever heard Mr. Frank W. Ingersoll's name as one of the owners of the Tecumseh property; he came and made an effort to settle the difficulty as between the Ophir and Tecumseh.

Q. I cannot listen to any long story about that; I don't want to consume too much time; if you will come to the point as soon as you can?

A. Well, he insisted on our making a proposition for settlement, which we declined to do for a long time; we finally did make him an offer of what we would take for the Ophir claim, and he thanked us for it and said he would present it to his parties in Denver, and make a reply to us, which he never did.

Q. Wasn't that along about 1894?

A. I can't give you the date; I think it was in 1895.

515 Q. Wasn't that after the Secretary of the Interior's decision?

A. My present recollection is that it was before the Secretary of the Interior's decision, but I am not positive about it; I kept no memorandum of it.

Q. Wasn't one of your answers to Mr. Ingersoll that you would spend $50,000 to win this case?

A. Possibly.

Q. How did you think you could do it legitimately?

Defendants object because not cross-examination; objection sustained; plaintiff excepting.

Q. At all events, neither at that time nor at any other time, have you given any one notice until you testified here last spring, that you were in any manner mistaken in your testimony at Pueblo as to the depth of the discovery shaft, or what it contained; isn't that true?

A. I don't think I was mistaken in my testimony; I gave my testimony as I understood the definition of a vein at that time.

Q. Now you have known ever since the application for an injunction in this case that Mr. Dahl filed a certain affidavit?

A. Yes sir.

Q. That has been quoted from here in this case?

A. Yes sir.

Q. In which he said that the discovery shaft was 40 feet deep?

A. Yes sir.

Q. At the very time you measured it and found it 15?

A. No sir, not at the very time—25 you mean was my measurement.

Q. Yes sir, 25; you have known that affidavit was made?
A. Yes sir.
Q. And in that affidavit he described that 25-foot hole as containing a vein, narrow at the top, and gradually opening out as it went down, containing mineral in marketable quantities?
A. Yes sir.
516 Q. You knew that that was a falsehood, didn't you?

Defendants object because not cross-examination; objection overruled, defendants excepting.

A. I don't know that it was a falsehood; will you let me explain that matter?
Q. If you want to?
A. I believe Mr. Dahl was mistaken in it.
Q. How did you think he could truthfully pretend that he had ever found such a vein as he describes in that affidavit, in that 25-foot hole?

Defendants object, being argumentative; objection sustained, plaintiff excepting.

Q. Why do you keep a man who will make that kind of affidavits in your employ, and put him forward in responsible positions, where he can perpetrate other foul play?

Defendants object, and move to strike out the question; objection sustained, plaintiff excepting.

Q. You knew at the time you applied for patent that you could only do it on work performed by either you or your grantors?
A. Yes sir.
Q. Did your grantors ever inform you that they had done any work on the Ophir claim, other than the sinking of this shaft?
A. You mean the original application for patent?
Q. Yes sir.
A. I believed at that time that the amount of work which had been done on the group of four claims would apply on all four claims as had been the previous ruling in the land office, and while, as I have told you, I made no affidavit in regard to the application for patent, I believed that three or four times as much work had been done as was necessary to secure patents on the four claims.
Q. That is, that it had been done on the other claims?
A. That it has been done on the other claims, yes sir.
517 Q. But that work was not intended or adapted to the development of the Ophir?
A. It was not.
Q. You have spoken of certain ore being removed from the Ophir dump?
A. Yes sir.
Q. That was ore taken out by you in the assessment-work of 1896, was it not?
A. Yes sir.

Q. That was ore that you had took out of the breast of the Tecumseh tunnel, wasn't it?

A. The ore that we took out of the breast of the Ophir tunnel.

Q. The tunnel, however, and the drift that the Tecumseh people had made?

A. How much of it?

Q. All of it?

A. No sir.

Q. What year was it that you took the ore out of the Tecumseh drift?

A. We took it out in 1895 and 1896 both.

Q. Wasn't this ore left on the dump there ore that had come out of the drift made by the Tecumseh people?

A. The Tecumseh people made a part of the drift.

Redirect examination:

Q. In answer to cross-examination you said that you stopped mining in 1895 because the mine was not paying?

A. Yes sir.

Q. State why you have not resumed work on an extensive scale, or beyond the doing of assessment-work since that time?

A. Because I thought as a business proposition that it was not wise in a claim that was in contest to spend a large amount of money on it.

Q. Did you or not make a reapplication for a patent as soon as you could after the other was disposed of?

A. Yes sir; just as soon as the other was disposed of.

Q. You spoke about the original application for patent
518 having been made in your name; was it made in your name alone?

A. No sir.

Q. In your name with others?

A. With others.

Q. Do you remember who the others were?

A. Henry E. Smith and Lyman Robison.

Q. You said that the owners of the Tecumseh only did their assessment in 1897; are you sure that that was the right date?

A. No, I think it was earlier than that, in 1895; I think I stated it was in 1896, but it was really in 1895.

Q. At the time Mr. Ingersoll called to see you, did he assume to represent anybody as counsel?

A. No sir, I didn't know that he was a lawyer at that time.

Q. Did he assume to represent anybody in any other capacity?

A. He did.

Q. You were asked whether this was before or after the Secretary's decision; do you remember the date of that decision?

A. I do not, or the date of Mr. Ingersoll's visit, neither.

Q. Do you remember about the date of the decision?

A. I could not say unless my memory was refreshed by something; I could not give the date of the decision.

Q. In addition to the notice which you posted upon the Tecumseh shaft, or the windlass, and this talk with Mr. Ingersoll, did you give notice to, or have any talk with anybody working upon the Whale?

A. Yes sir.

Q. When was that?

A. That was in 1895.

Plaintiff objects because not re-examination.

Defendants offer to show by this witness that during the year 1895 he notified the persons at work upon a claim called the Whale, which conflicts in its exterior boundaries with the Ophir Lode mining claim, that work done there was work done upon the Ophir claim, and done at their peril, and that the parties with
519 whom this conversation was had informed the witness that they were working for J. W. Carr and P. J. Lynch, two of the owners of the Tecumseh, and two of the witnesses who testified here for the plaintiff.

Plaintiff objects; objection sustained, defendants excepting.

Q. You were questioned about your testimony, at considerable length that you gave at the land office; I will ask you in connection with the same testimony read by plaintiff's counsel if you did not also testify as follows: "Have you made any examination of the 25-foot shaft aforesaid on this Ophir lode with reference to there being a vein, lode, ledge or deposit of mineral-bearing gold or silver or gold and silver? A. I have made a test, but only for gold. Q. What did you do with reference to that test? A. I took a number of pieces of rock from the bottom and sides near the bottom of the shaft, took them to an assayer, delivering them into his hands personally, telling him for what purpose I wished them assayed, asking him that they should continue in his hands until the assay was complete, and notifying him that I should want his affidavit as to the facts in the case; he furnished me with a certificate of assay."

Q. Do you remember that?

A. Yes sir.

Q. "Q. What was that assayer's name? A. James A. Doyle. *A.* Is this Exhibit A that certificate from the assayer or not? A. Yes sir."

Q. Do you remember that?

A. Yes sir.

Q. "Q What is the character of the rock in which this shaft is sunk? A. Porphyry. Q. Any crevice in the shaft? A. Yes sir."

Q. Do you remember that?

A. Yes sir.

Q. Calling your attentton to page 29, and beginning with a part of the testimony read by counsel for plaintiff: "Q. Have you ever cross-cut from that wall? A. Never. Q. What is the condition in
520 that immediate vicinity in that same character of rock—porphyry—as to there being walls containing veins, lodes, ledges or deposits of a different character of rock than the porphyry which constitutes the walls? A. In that particular vicinity the walls are

almost without exception composed of porphyry which carries the value sometimes as high as one thousand dollars or two thousand dollars per ton. Q. Is it, or is it not, the same character of porphyry which contains the mineral as that which constitutes what they call walls, veins, or lodes in that camp? A. Apparently the same or very similar. Q. To the ordinary eye, should you say there was any difference in appearance of the porphyry and the wall, and the porphyry which carries the valuable mineral? A. They are apparently the same. Q. Then how must it be tested to distinguish what is barren porphyry, or mineral-bearing? A. First by microscope; second, by panning; third, by assay. Q. What is the character of this mineralized rock which you had assayed by Mr. Doyle, as compared with the claims adjoining or on that hill or mountain where the Ophir is situated? A. Resembles them very much except in value. Q. Have you any of the ores or rock from other claims besides the Ophir here with you? A. Yes sir. Q. Will you produce them? Witness produces specimen of rock or ore. Q. Point out the ore or rock of the Raven lode. A. There are four pieces. Rock or ore *are* here introduced in evidence from Raven lode, which *are* marked Exhibit B; from Wedge lode, marked Exhibit C; from Ophir lode, marked Exhibit D; there are two of the Ophir and one of the Wedge. Q.

521 How far apart are these lodes—the Raven, the Wedge, the Ophir? A. The Wedge and the Ophir, the ends conflict; the Raven is about 1,500 feet east on the same hill. Q. From the Ophir or the Wedge? A. From the Ophir. Q. What is that hill called? A. Raven hill. Q. What is the character of the rock comprising the bulk of that hill? A. Porphyry. Q. Is it or not of the same general character and appearance on the whole hill? A. It is. Q. State whether or not that is a slide, the Raven hill? A. I don't think so. Q. State whether or not slide formation in which the porphyry is found? A. I don't think there is any slides of any consequence in the Cripple Creek mining district. Q. What reason do you give for that? A. Because the float in almost all cases is found immediately above the vein. Q. Do you know how that is on the Ophir claim as to the float? A. Yes. Q. State? A. It is immediately over the shaft; the whole hill is covered with float. Q. Can you say anything with reference to whether this ore of the Ophir, supposing it to contain $3 and upwards of gold, can be or not worked at a profit? If so, what can you say about it? A. The erection of a mill has just begun on the Pike's Peak placer under the Patterson patent, claiming to treat free-gold ores for $1.50 a ton; if successful, all low-grade ores in Cripple Creek camp can be profitably treated unless their value falls below that figure. Q. State whether or not the rock-mineral ore in the Ophir lode is of the class which you have just mentioned, free milling? A. I don't know. Q. Can you say whether that in the Raven or Wedge is that known as free-milling ore? A. I don't think it is." Do you remember that testimony?

A. Yes sir.

522 Q. Going now to your cross-examination on page 33, immediately after that part of the testimony in which you say that you have not a vein in the Ophir, I will ask you if you remember this testimony: "Will you examine these pieces of ore now handed you? A. Yes. Q. Can you identify that as Ophir ore? A. I cannot. Q. Does it resemble Ophir ore? A. The lighter piece resembles Ophir ore. The other does not. Q. As a general thing, do not the mines at Cripple Creek have veins which appear between well-defined walls? A. No they do not. Q. Where there are no well-defined walls, what is the formation where bodies of mineral are found? A. No two mines are identical that I know of. Q. You spoke of there being veins of porphyry, did you not? A. Yes. I am working on one in the Chief now that is filled with porphyry. Q. Has this vein any walls that separate it from the adjoining rock? A. Yes sir. Q. What are those walls composed of? A. Porphyry. Q. What would be the distinction between the hanging porphyry wall and the porphyry vein? A. The porphyry vein would carry mineral while the wall would be comparatively barren. Q. Would the formation be continuous and solid or would there be a line of demarkation between the wall and the vein? A. The vein would be likely to come against the porphyry slip, which would show a line of demarkation. Q. Have you in the Ophir shaft, passed through any hanging wall into a porphyry vein? A. Unless the present slip at the bottom of

523 the Ophir shaft is a wall, we have not. Q. Where is that supposed slip with reference to the bottom of the shaft? A. About the last three feet on the west side of the shaft. Q. Describe that supposed slip? A. It is simply a comparatively smooth wall of porphyry. Q. And which way does the surface run? A. runs lengthways of the shaft. Q. Is that is a wall of any vein is it a hanging or the foot wall? A. It is presumably the hanging wall. Q. Have you made any explorations for the foot-wall? A. No. Q. What is there to separate that wall from the adjoining rock? A. The adjoining rock is taken away so I can't tell you. Q. Then you have not worked in this shaft while the sinking was being done? A. No sir, never worked there. Q. Do you know that the rock that has been taken away from one side of this slip as you call it is any different from the rock on the other side? A. No sir, I do not know that it is, may be identical. I don't know that it is a wall at all. Q. If you had any reason to suppose that it is a wall of a vein why have you not made some explorations to discover the other wall? A. We have had too much work to do and too little money. Q. This slip that you speak of is upon which side of the shaft? A. West."

Going now to the bottom of the same page: "How high does the country rock at Cripple Creek sometimes run in gold where there is no vein proper to be found? A. I have known it to run as high as $1.60 to the ton. Q. Did you know that claims had been located conflicting with the Ophir? A. Yes.

524 Q. Did you not know that the Tecumseh, Red Bird and Star of Hope were all claims which conflicted with the Ophir?

A. I never knew there was such a claim as the Tecumseh until last week; I had no knowledge that the Star of Hope conflicted with the Ophir; I did not know that the Red Bird conflicted with the Ophir."

Q. I will ask you if you remember this testimony: "Mr. Johnson asked you whether you knew the Red Bird discovery shaft was within the Ophir lines; did you understand that that discovery shaft was on any other mining claim than the Ophir; if so upon what claim? A. I understood that the Red Bird shaft was upon the Minnehaha claim; I have no information now that leads me to be certain that the Red Bird discovery shaft is on the Ophir claim. Q. You mention the slip on the west side and in the Ophir shaft; does that slip dip away or towards the perpendicular line dropped from the top of that shaft? A. It would be difficult to tell. Q. If it is a fact that you cannot claim with any degree of certainty that this slip in the shaft of the Ophir is a wall of the vein on that lode, upon what do you base your claim here for right to go on and maintain your right in your application for patent for the Ophir claim? A. Simply that we have got mineral enough in the bottom of the shaft to lead any enthusiastic miner to go on and follow it up, and a higher value of mineral than the country rock has ever borne, as far as my experience goes." Do you remember that testimony?

A. Yes sir.

525 THOMAS L. DARBY, being first duly sworn on the part of the defendants, testified as follows:

Q. Where do you live?

A. Victor.

Q. How long have you been a resident of Colorado?

A. Something over 23 years.

Q. What is your business?

A. I am a mining engineer.

Q. How long have you followed the business of civil and mining engineering?

A. 26 or '7 years.

Q. Whereabouts have you been engaged in the practice of your profession?

A. Tennessee, principally in Colorado.

Q. In what parts of Colorado?

A. Leadville, Aspen, Cripple Creek and different prominent camps of the State.

Q. Have you ever lived in Leadville?

A. Yes sir, two or three years.

Q. When was that?

A. From 1893 to the spring of 1896.

Q. Have you since that time had occasion to visit the camp more or less frequently?

A. Yes sir.

Q. Have you had occasion to examine the mines and vein formation in that district?

A. Yes sir.

Q. At about what time did your acquaintance with the camp begin?

A. In March or April, 1893.

Q. Are you at all familiar with Raven hill?

A. Yes sir.

Q. Have you had occasion to examine many, or any, of the mines of that hill?

A. Yes sir, most of them.

Q. Have you been personally an owner in any claims near the Raven and Elkton?

A. Yes sir.

Q. What ones?

A. What is now called the Walter, and the Snide and Tornado.

526 Q. Do you know where the Tecumseh and Ophir claims are located?

A. Yes sir.

Q. How long have you known of them?

A. I have known of them for some time; I never made any examination of them until the second and third of February of this month.

Q. Have you recently given any attention to or examination of the discovery workings of the Tecumseh and Ophir claims?

A. Yes sir.

Q. When was that?

A. The 2nd and 3rd of this month.

Q. How long a time were you engaged in such examination?

A. I judge altogether six hours on the two shafts.

Q. Please describe to the jury in your own way the Tecumseh discovery shaft, its depth and its characteristics, and what if anything it shows as to the exposure of a vein, lode or ledge anywhere within it?

A. The Tecumseh shaft is three and a half by seven feet, 38 feet deep, and lies, the long side in a northwest direction—northwesterly. It is timbered about 10 feet deep; it is sunk in the country rock, porphyry. It shows the usual characteristic cracks which are in the porphyry all over Raven hill, there, cooling cracks or drying cracks; they are the cracks of the whole hill. There are cracks running almost vertical, and there is a system running horizontally. The method of that cracking is very similar to that which you would see in a dried-up pond or reservoir where there is a good deal of mud in the bottom and cracked not only vertically but horizontally at different depths.

Q. What is the rock formation there?

A. Porphyry.

Q. Is that what is called an eruptive rock?

A. Yes sir.

Q. Does it or not have a tendency to crack and joint in the manner that you have indicated?

A. Yes sir.

527 Q. Are the cracks which are more or less vertical any more persistent or well defined or well determined than those which are more horizontal in their character?

A. I don't think they are; of course, they are exposed for a greater length by the shaft being as it is, but they are no larger and better defined.

Q. What is your definition of a vein, lode or ledge?

A. A true vein or lode is a fissure of indefinite length and depth, generally caused by a movement of the earth's crust and extends to great distances, depths; it is filled with mineral matter, and sometimes with precious metals.

Q. There are different kinds of veins, are there not?

A. Yes sir.

Q. What is the characteristic vein filling of Raven Hill, so far as you know?

A. The characteristic filling is the country rock with some quartz.

Q. How is the vein filling which you say is composed largely of the country rock distinguishable from that portion of the country rock which is barren of the precious metals?

A. It is very difficult to distinguish it at all.

Q. Can it be distinguished by assay or otherwise?

A. By assay only; you cannot distinguish it by the eye very often.

Q. What is known in mining parlance as impregnations?

A. Impregnations differ from other ore deposits in that they have no well-defined boundaries; they merge into the country rock to indefinite distances and can only be determined by assays.

Q. Are impregnations at all characteristic of vein formation in that camp?

A. Yes sir, very much.

Q. Is there anything in the Tecumseh discovery shaft that from your examination seems to constitute a vein, lode or ledge?

A. No sir.

528 Q. Either by way of a fissure or by way of any impregnation or infiltration of ores or precious metals from the crevices into the walls?

A. No sir, there is not; there might be in close proximity to a vein up the hill, not to exceed 200 feet above it; I would not be at all surprised if some of that gold from that vein, a very small particle of it, should be washed down and deposited in these cracks, or in any cracks between there and the vein.

Q. Is it or not a fact that deposits of gold can be found up there below the apex of well known or defined veins?

A. Yes sir.

Q. And carried down in here, by what manner?

A. By the action of the elements, the decomposition of the vein above naturally the rock would gradually work down the hill and decompose, and what little particles of gold would be in it, would

ultimately settle in these cracks in the country rock, and in that way you might get assays there.

Q. Did you or not notice in this shaft any working other than the shaft itself?

A. There is a drift to the east about 10 feet.

Q. Through what is that driven?

A. Through porphyry.

Q. Is there any seam, cleavage, plane or crack shown in that cross-drift or cross-cut that does not appear in the shaft itself?

Q. There is one nearly vertical at the breast of the drift, and there is a horizontal one which is the roof of the drift.

Q. Are those similar in appearance and character to the ones that are found in the shaft?

A. Yes sir, the same cracks, probably caused or produced from the same cause.

Q. Did you take or make any calculation for the purpose of determining in the shaft the strike of any of these cracks or fractures upon which that shaft is sunk?

A. I took a compass course; the strike is about north.

529 Q. Please take your scale and give me the distance from the northwest corner of the Tecumseh location to a point where that pencil line would cross the west side line?

A. 73 feet.

Q. That is from the northwest corner to this point here?

A. No, I thought you meant across there; 140 feet.

Q. Now then please give me the distance from the northeast corner of the Tecumseh claim to the point where the same line would cross the easterly side line of the Tecumseh claim?

A. About 705 feet; that is a rough surface to measure, but about 705 feet.

Q. Would the Ophir discovery shaft lie to the east or west of the line whose crossings you have just designated?

A. It would lie to the east of it.

Q. What examination did you make of the Ophir discovery shaft?

A. I made a careful examination of it from the timbers down.

Q. Please describe that to the jury?

A. That shaft I think is 3 x 6 where it is timbered, larger below, vertical 70 feet; the long side also has a course northwesterly; it is timbered I think about 16 feet. From there the material is exposed. It is one main fissure from a point that I measured at 33½ feet from the present collar of the shaft down to the bottom; that is the main vein fissure; there are parallel minor fissures which are not so continuous as the others; one of them would appear as a sort of a wall on the westerly side of the shaft, and as it nears the top it gradually merges into the other line of fissure; it is not prominent. There is however a parallel fissuring along the main fissure there; it is narrow; the mineralization is chiefly in the main fissure, but a careful examination there which can be easily made, the

530 ladder being on the south side of the shaft, shows that all that material is mineralized on down the depth of the shaft.

There is an impregnation of secondary materials in there which are not constituents of the country rock.

Q. At what distance below the collar of the shaft can these conditions be observed?

A. You can observe them from where you can see the material from the bottom of the timbers, 16 feet I think, down.

Q. When you speak of any parallel seams or cracks or fissures, do you have reference to anything that is delineated upon this sectional plan?

A. There is one that is not just exactly shown there; it shows practically at 24 or 25 feet down, and crosses over, and then follows down here, and for a distance down here, it is apparently the west wall; it looks somewhat like the west wall of a vein; it is a parallel fissuring, and it merges into the country rock; the vein there is narrow and widens as it goes down; it is very small up here, and widens as it goes down.

Q. That view represents the southeast end of the shaft?

A. Yes sir.

Q. And the view is from the north, looking southward, isn't it?

A. Yes sir.

Q. State how nearly to your mind that plan represents the position of the vein in the shaft?

A. It represents it very well indeed.

Q. How is it designated on that plat? What is intended to represent the vein?

A. That red line there is intended to represent it.

Q. The red coloring?

A. The red coloring, yes sir.

Q. In the actual view of veins, in the rock, are the lines as distinctly apparent as they are upon the maps?

A. No sir.

Q. Is that red coloring the conventional color used by engineers for the designation of mineral deposits?

A. Yes sir, it is done more on jury matters than any other because it will attract attention quicker; that is all. The point
531 don't look anything like that; it is not that color.

Q. Have you any method of illustrating what is meant by impregnation of mineral matter in rock?

A. Yes sir, I made some little tests here the other day; I picked up some bricks over here at this building, and pieces of sandstone, and tested them by dropping a little red ink into some water; these show a ten-minute test for each.

Q. What is the coloring matter of the ordinary commercial ink?

A. Aniline, I think; they were each submitted to ten-minute tests; each of the edges touched in the water that way; that white brick seemed to be more porous than any of them, and the impregnation went almost to the top in ten minutes.

Q. When you say you subjected them to ten-minute test- what do you mean?

A. I held it in that position for ten minutes, the edge of it touching the water.

Q. And as the result, what did you find?

A. I find the stuff will work into the rocks; here is a test made from a piece broken off of this rock, right in that end there; it shows a different density of the rock, and that would make a different degree of impregnation.

Q. So that the absorption by the rock of the liquid coloring matter indicates, does it not, the manner in which the theory or idea of the absorption by the rock of ore-bearing material or mineral-bearing material is carried on?

A. Yes sir. You see, that if there are any metals in this they would probably settle, most of it at the nearer edge, letting the water percolate over there in solution, which carried the precious metals, there would be a line where there would be no mineral to deposit; and it is in that way that I can explain these impregnations at Cripple Creek. You see here on that piece of blotting paper;

532 this was put into aniline ink. that piece that is red, and that shows it gradually merges out to nothing; that was not submitted to ten minutes; it ran up very rapidly; it would have gone to the top of it in ten minutes, but it shows the idea of the gradual leaching out of the metals until there is nothing but the water.

Q. In this matter of impregnation, state whether or not one wall is more likely to be affected than the other, or whether the process goes on with each?

A. It depends on the character of the rock; if it is all the same it would probably affect one wall just the same as the other, as you see in these smaller pieces here.

Q. That depends?

A. The density of the rock affects it more than anything else.

Q. If the walls of the rock are similar, the result as to each wall would be the same, or practically so?

A. It would probably be the same.

Q. Do the avenues or sources of this material which is afterwards blended into the rock, generally constitute the fissures separating them?

A. In the Cripple Creek district?

Q. Yes, or in any other district?

A. Yes sir; well the Cripple Creek veins are different from veins in other camps; the rocks are different, and the impregnations are different than in any other district.

Q. In what respect?

A. The veins there were probably fault fissures; very narrow and of very slight movement, and the filling, simply all impregnation of the country rock; in many fissure-vein districts the fissures are wide, filled with quartz, and then other secondary metals or minerals, and the vein material, the precious metals, mixed in with it. But in the Cripple Creek district they are largely impregnations of the country rock.

533 Q. If, Mr. Darby, the crack or space between these two pieces of brick represent the fissure through which the mineral matter was disseminated into the rock beyond, forming the vein, the rock of which upon each side of the crack is infiltrated or

impregnated with gold, what would be the walls of such a vein? Would it be the crack or something else?

A. The crack would be the fissure; the sides of the vein would be the limit of the impregnation.

Q. That is, the vein or lode would be here?

A. From there to there.

Q. And the crack would be there?

A. The crack or fissure would be there; it would be in there, and the sides of the vein would be irregular, or are irregular in that district in most places.

Q. Is there or not a vein, lode, or ledge within the Ophir discovery shaft?

A. Yes sir.

Q. Existing at what distance below the shaft, or collar of the shaft, so far as you can determine?

A. As I said before, the main fissure disclosed in the shaft extends about 33½ feet from the present collar, and then there are these parallel small minor fissures, and the general impregnation, I would say, extended to the top of the rock in place there; a careful view of that end of the shaft there would disclose secondary matter all the way up as far as you can see to the timbers.

Cross-examined by General JOHNSON:

Q. You say you have examined the vein formations in the Cripple Creek mining district pretty extensively?

A. Yes sir.

Q. Is it not a characteristic of that formation that you find veins close to each other, and running parallel with each other, having the same dip?

A. In some localities.

534 Q. On Raven hill?

A. On Raven hill there is there; these veins are a parallel fissuring, and for a certain distance they are known parallel veins, but then those veins are more than a hundred feet apart.

Q. Do you not find those parallel veins from a few inches apart to a few feet apart?

A. On Raven hill the parallel fissuring is from a quarter of an inch to two or three inches; it extends quite wide in some places, ten or twelve feet wide.

Q. What do you call that formation?

A. That is the country rock, mineralized, impregnated.

Q. There the veins are well defined?

A. Yes sir.

Q. And the fissures are well defined?

A. Main fissures well defined, the mineral verging out into the country rock.

Q. Consistent and continuous, running right along by each other?

A. No, they are not continuous; this parallel fissuring does not apply to the whole of the vein; in places you will find the mineral right in one body, and then again you will come to where these

parallel fissurings look like a banded structure, and in other places it will merge right out into the country rock from the mineralization.

Q. You found in the Tecumseh discovery shaft a system of these parallel fissures, did you not?

A. What I call a fissure is something which extends to a great depth in the earth; I found a system of cracks there.

Q. How deep must you go towards the center of the earth before it can become a fissure?

A. The general rule is that a fissure is a movement of the earth's crust, as thick as it may be; that is the general rule. We don't know how thick the earth's crust is, and I couldn't tell you.

535 Q. If you can find you can trace it 38 feet into the solid formation and find that it is continuous, regular, consistent and persistent to that extent, opening out in places with distinct walls—don't you call that a fissure?

A. Not necessarily; these cracks you must understand in this porphyry were not overflows, but outbursts, and of course, they did not all occur at once; they were many years, probably thousands of years, in getting the successive outbursts in this porphyritic matter; now the probability is that this surface cracking, this system that you see in the shaft at that depth will extend to the next preceding bed of porphyritic matter which has been deposited there; that is, I don't say by that that there is a regular line of bedding in the Cripple Creek district, for while it occurs in some few places, generally the successive deposits of porphyritic matter merge into each other, but the probability is that this surface system of cracking, and each system as it extends downward will apply to each successive deposit of the porphyritic matter; I know from experience in the district that these vertical cracks generally are cut off absolutely when you get any great depth on them.

Q. The vertical cracks?

A. Vertical; the horizontal, of course, you can't see so much of them, because very few people make much development on the horizontal cracks.

Q. But the vertical cracks?

A. Such cracks as these will generally cut off with the next succeeding bed of deposited porphyry or next prior deposit of the porphyritic matter; these surface cracks will cut off and a new series begins.

Q. Can you tell where one deposit ends and the other begins?

A. You cannot, in many places; in the Victor mine you can tell where there are three separate ones, but as I say, generally in the andisitic breccia there, the deposits will merge one into the

536 other, so that it is very difficult to distinguish where one ceases and the other begins.

Q. At what depth does that change of deposit occur?

A. You can't tell at all.

Q. In the one instance you have mentioned?

A. In the Victor mine?

Q. Yes?

A. As I remember, it is something near 200 feet.

Q. Do you mean to say that a miner must go through one original deposit of porphyry and into another before he can find out whether he has got a vein or not?

A. No, a miner generally knows a vein.

Q. You are pronouncing these fissures, as I call them—I don't care what you call them—that you found in the discovery shaft not to be veins because of your theory, that they may not reach the extent beyond the original first layer or deposit of porphyry?

A. I say this from my experience in the district and examining shafts. My impression is that they all cut off, and it surprises me that many are not cut off, too.

Q. By what different process, in your opinion, were these fissures in the Tecumseh discovery shaft originally made from your process by which the deeper fissures were made, or the deep ones?

A. The deepest are made from a movement of the earth's crust, a fault; these are probably made from the cooling or the drying of the porphyritic deposit there.

Q. Isn't it one of the theories of all scientists that all of these fissures, the deepest that have ever been discovered, were originally made by a cooling process of the surface of the earth?

A. No, that is not the case; many of them were made by faulting; the cooling process would only apply to eruptive rocks; in a great many of the fissures you go through not only the eruptive but the sedimentary rocks.

537 Q. Might not the fissures in the sedimentary rocks be created by the cooling process as well as any other?

A. Not from cooling; it might be there are fissures in sedimentary rocks, but they are from drying.

Q. Drying and cooling go along together, do they not?

A. Not always, because in one, the drying would be characteristic of the sedimentary deposit, and cooling implies the rocks must have been heated.

Q. What is your theory as to the manner in which these crevices in the Tecumseh discovery shaft were made?

A. Probably by cracking partially by frost.

Q. Probably by what?

A. By cooling cracks, partially by frosts, freezing and thawing; water percolating down and freezing.

Q. You don't mean to say that these cracks 38 feet deep would be made by frost, do you?

A. They can be begun by frost, and gradually work down, but the probability is that they are cooling cracks.

Q. They must have existed there some length of time?

A. Yes sir.

Q. Back to the time that no one can discover when the surface of the earth was a molten mass?

A. It was not a molten mass, no sir, not back to that time.

Q. About how old are those crevices?

A. I don't know; I have no idea; they are known to succeed the

tertiary deposits; that is as much as you know how far back it was, in geological history how many years, we cannot say.

Q. The same cooling process that made these may have made all of the crevices on Raven hill, may it not?

A. No sir.

Q. How do you know?

A. Because knowing with all fissures that there has been a slight movement, you can see it; in that way you account for ore chutes in veins; the slight movement of the vein, either laterally or
538 vertically, probably accounts for the ore being in chutes in places.

Q. Might not these faults be created at the time of the cracking and breaking from the cooling process?

A. Mr. Penrose is rather of the opinion that the last faulting there was the vein filling.

Q. Might not these faults be created at the time of the cracking and breaking from the cooling process?

A. I said no.

Q. Why?

A. Simply because one shows a movement of the vein, either vertically or laterally.

Q. Would not the same power by which the surface of the earth was cracked, happen to a great depth; might it not make a displacement along the line of that fracture?

A. Possibly it might.

Q. Might that not create a displacement along the line of these fractures just as well as an upheaval by an earthquake?

A. That kind of a fissure generally does make a displacement; a false fissure generally does make a displacement; it is remarkable in the Cripple Creek district that the displacement——

Q. You don't answer my question; might not such displacements as you find on Raven hill occur by the cooling process just as readily as by the upheaval of an earthquake?

A. No, the cooling process don't require any movement of the body and mass at all; as I stated before, it is more similar to the drying up of a pond or reservoir with a lot of mud in it; it will crack up and down and it will crack horizontally.

Q. That is a similar illustration, but you don't pretend to say that these crevices going down through solid formation, traced regularly down to the depth of 38 feet, were created in the same manner as the cracks in a mud hole?

A. No sir, because the cracks in a mud hole are distinctly
539 from drying, and the others distinctly from cooling; if you will compare the relative size of the ponds with the size of the porphyritic area in Cripple Creek, and understand the proportion, 38 feet would not be a very long lake; I have seen a crack in the Raven mine longitudinally 45 feet straight, and no one ever contended it was a vein.

Q. You don't pretend, that you must ascertain that a crevice in the porphyry on that hill or any other hill must have been pro-

duced by a convulsion of the earth before it can be pronounced a vein?

A. I do say it; that is just what I do say; it is a fault line or fissure in the movement of the earth's crust; that is just what I do say.

Q. That is the only way a vein can be created in your opinion?

A. I don't say that; that is the way those veins were created, by a movement of the earth's crust.

Q. You found in the southeast corner of the Ophir discovery shaft a vein at the depth of 33 feet and 6 inches, you state?

A. The main fissure, yes.

Q. That has two distinct walls?

A. It is very close there; of course, there are two sides to the fissures, but it is very close, a very narrow vein, which widens.

Q. A narrow vein?

A. It expands apparently at the bottom, to 8 or 10 inches wide.

Q. Did you measure the dip of the vein?

A. I did not; Mr. Moore has made the maps; I simply tested them. We took down from his office, before we went up, the points which he had noted these things, fastened a tapeline at the top, went down and tested his tests, and I also tested the depth at which he had these parallel cracks in the Tecumseh shaft merely to see that his map was correctly made; that was all; he had done all the work; it was not necessary to make a survey at all when I was there.

540 Q. You were preparing yourself as an expert witness at that time to testify?

A. I made an examination as an expert witness, yes.

Q. Didn't you know that the question *that* the dip of the vein was a very material question?

A. I would consider it was very material, but not so as to require me to make a resurvey; Mr. Moore and Mr. Smith had both made surveys, both first-class engineers.

Q. Can you tell whether the dip of that vein is ten or fifteen or more degrees from the perpendicular?

A. My impression is that it is probably 85, closer to 85 than anything else.

Q. 85 from the horizontal?

A. 85 from the horizontal, yes; closer to that than anything else.

Q. The less the dip of the vein is from the horizontal, the more distance it will make from the shaft as it goes up on its dip from the 34-foot point, will it not?

A. The least dip the more distance it will make.

Q. Yes, the least dip from the horizontal?

A. The least dip from the horizontal, yes.

Q. The greater the dip is from the perpendicular, the greater distance this vein will make from the shaft after it has passed up to the 34-foot point, will it?

A. Yes sir.

Q. That is to say, if the vein started off here, it would run sharply away from the shaft?

A. Yes sir.

Q. But going up here, more nearly perpendicular, reaching the 34-foot point here, the less the dip of the vein is, the less distance it will go from this shaft; now, did you make any calculation to determine how far this vein, if it passes out of the shaft at the 34-foot point from the collar—did you make any calculation as to how far it would be away from the wall of the shaft at 28 feet?

A. I did not, no sir.

541 Q. Or at 25 feet?

A. No sir, I didn't make any calculation.

Q. Can you make a calculation there?

A. Yes sir.

Q. How long will it take you?

A. Not over a minute; at what distance?

Q. From 34 to 35 feet?

A. What shall I take this course?

Q. You may take 10 degrees from the perpendicular?

A. It is a foot and 58-hundredths.

Q. You may take it at 80?

A. At 80 it would be a foot and 58-hundredths away.

Q. One foot and 58-hundredths?

A. Yes sir.

Q. Wouldn't it be further than that?

A. No sir, that is taken the longest way.

Q. It is a little over a foot and a half?

A. Yes sir, it is a little over a foot and a half.

Q. A little over 18 inches?

A. Yes sir.

Q. Doesn't that crevice pass directly out of that shaft at 34 feet?

A. That particular crevice, I didn't see any more on top of the shaft.

Q. You didn't see any more of it?

A. Not that particular crevice; at least I didn't the main vein fissure.

Q. You don't pretend that there is any other fissure in that shaft that is a vein, do you?

A. There is other fissuring in the shaft; this minor fissuring there, very close, tight, minor fissuring.

Q. Is there any other fissure in that shaft above 34 feet, or 33½ that in any manner approaches, or can be compared with any of these fissures in the Tecumseh shaft?

A. I don't know.

Q. In size or regularity?

A. You could not compare them with the fissures in the Tecumseh shaft; it is a minor fissuring which comes in at the east-

542 ern side of the shaft at 24 to 25 feet, and crosses further down; it appears to — what some persons might call walls.

Q. Is there anything in that shaft above 34 feet, other than the ordinary joint cracks of porphyry?

A. Yes, the joint cracks of porphyry along the vein don't show at all; there is no horizontal jointing there, as there is down in the

Tecumseh shaft; they don't show any horizontal jointing; there is a distinct vein fissure, parallel fissuring, of minor fissures, caused by the contraction along the line of the vein fissures.

Q. Then you find this parallel vein fissuring in the Ophir shaft at 25 feet, but you cannot find any parallel fissuring in the Tecumseh shaft at the depth of 34 feet?

A. That is a different situation entirely; I didn't say it was the same parallel fissuring; I said a minor fissuring in this shaft which can be traced up to the depth of 24 or 25 feet from the collar of the shaft; they are simply very slim and tight; but it shows that there is a minor fissuring, and the shaft discloses it, but it is an altogether different kind of fissuring from what it is in the Tecumseh shaft; there is none of the horizontal cross-fissuring.

Q. Don't you find that horizontal fissuring in all mines, more or less?

A. You find it in the country rock of all the mines in Cripple Creek.

Q. Don't you find it in veins?

A. Not in veins, no sir.

Q. In the Gold Coin mine?

A. I don't know that I have ever been in that; I never was in that at all.

Q. Don't you know that throughout that mine, all through where they are taking out pay mineral that that horizontal fissuring occurs?

A. I do not; I don't know anything about it.

Q. Do you claim that that horizontal fissuring detracts
543 from the other fissures as being veins?

A. No, it would not at all.

Q. You have done some experimenting with those materials for the purposes of illustration?

A. Yes sir.

Q. Your theory is that wherever there is a true fissure and a true vein, we will say the fissure is six inches thick, and that fissure filled with mineral, that the walls will be impregnated, thus making the vein or lode of greater width than that crevice?

A. In places.

Q. There are places where it may occur?

A. Yes sir, it depends on the character of the wall rock largely; it don't occur all along the vein.

Q. Let's get at the general fact, and not of a frequent nature; as a general thing, don't miners and mine-owners, when they find a fissure with walls six inches apart, call that a six-inch vein?

A. Yes sir.

Q. And don't they expect to find the bulk of their ore in that fissure?

A. Yes sir.

Q. Now, we will assume that it is impossible that there may be an impregnation of the country rock, but is that the general rule?

A. It is characteristic of the Cripple Creek district.

Q. It is characteristic, we admit?

A. It occurs in all veins there.
Q. Does it occur in the majority of them?
A. All I know anything about.
Q. And a majority of the distance along the veins?
A. That I cannot say, because in some places the rock will be more dense and there will be very little impregnation; it depends more upon the density of the rock than anything else as to the impregnations.
Q. You may come to a place in the porphyry where it is harder than other places?
A. Yes sir.
544 Q. And find no vein at all?
A. You would still find the fissure.
Q. I say, you may never find a vein near that hard place at all?
A. Whenever you have a true fissure.
Q. I am not speaking of fissures at all; I am speaking of porphyry country rock; sometimes the country porphyry is harder than in other places, is it not?
A. Yes sir.
Q. And don't bear any mineral at all?
A. Probably not.
Q. It may be miles from a vein; that may occur irrespective of a vein, may it not?
A. Yes sir.
Q. Isn't it a fact that very often, as you approach a vein with a shaft, you never detect anything until you break right into the vein?
A. What do you mean by sinking a shaft, or drifting from the shaft?
Q. Either way?
A. That is often the case, yes.
Q. Is this rock in that shaft above the 34-foot point of any different color from the rock all around the shaft; that is, in the southeast corner?
A. I didn't examine carefully anything but the southeast end there; it shows a deposition of secondary minerals that is probably not the original constituents of the country rock; there was no means of getting around to examine it, but in the southeast end there certainly shows the deposition of secondary metals that was probably not a constituent of the original country rock.
Q. At what point does it first show so you can see it?
A. All the way from the timbers down; I did not make any examination of it below 35 feet, because there the fissure was well defined; from 35 feet up, I examined it carefully to see if there was any mineralization there, went up and down it I think twice, examining each way twice or three times, and examined it each way going up and down carefully.
545 Q. How does the rock look in this place that you examined first, right over where the vein comes into the shaft, and right opposite where the vein must be, if it continues on up on its dip?

A. Right parallel to it.

Q. In other words, you examined the southeast corner of the shaft?

A. The southeast end, clear across.

Q. The southeast end of the shaft, in the light of the known existence of the vein below, and in the light of the supposition that the vein does continue on up opposite the place where you examined it?

A. Yes sir, I would like to explain.

Q. Answer the question first, and then explain as much as you please?

A. I examined it to see if there was any mineralization there.

Q. That is evading it; I want to find out where you examined it?

A. I told you in the southeast end of the shaft.

Q. This examination was made in the light of the knowledge that there was a well-defined vein just below it?

A. No, not that at all; when I first went there I didn't know where the vein was; I began my examination as soon as I got to the foot of the timbers; I didn't know where the vein was; I never had seen the shaft.

Q. You never had heard where the vein was?

A. I had heard that the contention was as to whether there was any mineralization above or below 25 feet from the surface; 25 or 28 feet from the surface; for that reason I proceeded at once to make a very particular examination to see if there was any appearance of mineralization there.

Q. You made that examination with the knowledge that the vein was directly below that spot, and that is the reason why you selected that spot to examine it, wasn't it?

A. I had no knowledge that there was any dispute as to the existence of a vein below that depth.

546 Q. And in that particular corner or end of the shaft?

A. I was not told anything at all about the particular ends or corners; I was simply told that there was no dispute as to there being a vein.

Q. Why did you not go to work and examine the other end of the shaft then?

A. Simply because there was no ladder in it, and there was no windlass there; there was no way to get out of there; no stulls.

Q. Didn't you go right up and examine that corner, that end of the shaft, with the knowledge and information that the vein did appear on that side below?

A. I was not told just where the vein appeared; I was told that there was no dispute as to there being a vein below, I think it was 26 feet, 25 or 26 feet, something like that. I was told that, but as to where the vein was I was not told at all.

Q. You knew the vein disclosed below so far as the crevice was concerned, passed out of the shaft, didn't you?

A. I knew that from Mr. Moore's maps, that the vein was exposed below, yes.

Q. You knew that according to those maps it passed out, so that it would be projected up on the southeast corner, didn't you, or southeast end?

A. There had been some explanation of that.

Q. As I understand you, the more porous a substance is, the more readily it will take up anything of a liquid nature?

A. Yes sir.

Q. This is much more porous than porphyry, isn't it?

A. I don't know; some of it is, and some of it is not, but it probably is more porous than porphyry, but you must understand that that was only subjected to a ten-minute test; the mineral solutions in there came in probably in a very hot form, and lasted for a long time, and it is well known that hot waters are much more permeable than cold waters.

547 Q. That is one theory, and another theory is that these veins were filled by water percolating through the veins, running through?

A. Certainly.

Q. And not standing as in a bog?

A. Not standing, running from below.

Q. Waters percolating through a crevice would not impregnate as extensively as standing water where the substance to be impregnated stands in the water a*b*d draws the water up to it, would it?

A. It would depend upon how long the water has percolated through it; if it is a continuous flow through it, I don't see that there would be any difference.

Q. Not if the crevice was filled with the water perhaps?

A. Yes, sir, that is it; those questions naturally arise.

Q. It is not supposed that there has been a flow of water through these crevices?

A. Yes sir, it is decidedly.

Q. Is that the way it is supposed veins are filled—by the flow of a stream of water through each crevice?

A. Yes sir; these crevices are very small, and particles of mineral matter and metals carried in solution, and the probability is the character of the wall has more influence upon precipitation than anything else; that is the general accepted theory now; it is the character of the wall rocks——

Q. To make this water flow through a crevice there must be a spring immediately near the surface of a vein providing the water from below, by some power?

A. My impression is from below; it is known that all rocks carry water always.

Q. Is it anybody's theory that the water from below is or was for any long period of time constantly bubbling up through these crevices?

548 A. No, it is probably periodical, lasting for a few days or a few weeks, or maybe a few hours at a time, but one successive flow after another, perhaps in the form of the geysers that you see in different places.

Q. That condition would not enable the rocks to take up the amount that it would if it was standing all the time, would it?

A. Probably not.

Q. Did you see, in the Ophir discovery shaft, any rock of a materially different color from the country porphyry in that southeast end?

A. Only the mineralization that was there; otherwise it was the same general rock that the shaft was sunk in.

Q. Is there any quartz there at a depth of 25 feet?

A. Yes sir, there is quartz in all that porphyry.

Q. Why didn't you bring some of it from there, at 25 feet?

A. I didn't think it necessary to bring any specimens.

Q. The only specimen that we have seen produced here of rock from that shaft is that one?

A. Mr. Moore took that.

Q. That came from the drift down below?

A. Yes sir, in the vein.

Q. Do you say you saw any such rock as that at the depth of 25 feet?

A. I didn't notice any, no sir.

Q. Did you find any until you got down to 34 feet of that kind of rock, or any such colored rock as that?

A. I don't know that I did.

Q. Don't you know that you did not, as well as you know that you are sitting there?

A. No, I don't think I did.

Q. Don't you know you did not, if you know anything about that shaft?

A. I say that there was an impregnation of the country rock; that was all I said.

Q. Did you test it by assay?

A. I did not.

Q. How do you know it was impregnated?

A. What I can see with my eyes, I know.

549 Q. Why didn't you bring something here that somebody else could see with their eyes?

A. I don't know; I suppose it was because the jury was there before, and I naturally supposed they would go again.

Q. You defined a vein, I believe; how did you define it?

A. As a fissure of indefinite length and depth, filled with mineral substances, sometimes carrying deposits of precious metals.

Q. There are a great many definitions of veins, are there not?

A. Yes sir, a great many.

Q. A vein is an aggregation of mineral matter in fissures of rock, is that not a definition?

A. That is a Century Dictionary definition of a vein, and a very good definition.

Q. The definition of a lode given by geologists is that of a fissure in the earth's crust, filled with mineral matter, or more accurately, an aggregation of mineral matter containing ores in fissures; is that a definition?

A. That is a good definition, yes.

Q. A lode is a mineral body in the general mass of mountains?

A. Yes sir.

Q. The terms vein, lode and ledge are supposed to be nearly synonymous, and mean a continuous body of mineral-bearing rock within defined boundaries in the general mass of the mountain?

A. That is oftentimes a good definition.

Q. A vein or lode authorized to be located, is a seam or fissure in the earth's crust, filled with quartz, or some other rock in place, carrying gold, silver or other valuable mineral deposits named in the statute; isn't that rather more of a practical definition than the others?

A. Yes; you will notice it says a fissure in the earth's
550 crust; the earth's crust is very deep, and that is a very good definition.

Q. The earth's crust extends to the surface, does it not?

A. Yes sir.

Q. How deep must a vein go in order to be a vein, according to your notion?

A. I couldn't say as to that; I don't know; there are none of them, or very few of them, that have been developed to the depth that they do go.

Q. Does not every definition, every correct definition of a vein, presuppose boundaries?

A. How do you mean, walls?

Q. Boundaries of some kind?

A. The boundary of a fissure is the boundary of the mineralization; that is a question that is altogether characteristic of a particular vein; what will apply in one district won't apply in another.

—. Are there any other veins in Cripple Creek except fissures?

A. I don't know of any, no; I will say this—there is along the volcano there a mineralization of the granite rim, but that is not fissure; on the rim of the volcano there, there is a mineralization of the original granite rock.

Q. The great mass of mines on Raven hill are fissure veins, true fissure veins, are they not?

A. Yes sir.

Q. Within walls?

A. Yes.

Q. Within a crevice?

A. Yes sir.

Q. And that crevice is filled with mineral?

A. Not always.

Q. Sometimes if it is not barren, the crevice would be filled with mineral?

A. Yes sir.

Q. And sometimes the walls may be impregnated more or less from the vein?

A. Yes sir.

Q. Now do you contend that a vein has been discovered until you have found one of those walls?

A. It might; you might sink into a vein so wide that there
551 would not be any wall on either side; if it was mineralized and carried values, it would be the discovery of a vein.

Q. If it was mineralized and carried values, you would presume that there were walls somewhere, would you not?

A. Yes, that would be a natural presumption.

Q. You would follow a vein which might be a vein in a legal sense or in the sense used by miners, wouldn't you?

Q. You would want to find the fissure before you would call it a fissure.

Q. At least you would want to find one side of it?

A. Yes sir.

Q. You might not have to go through it and find each side?

A. No.

Q. If you found one boundary you would be certain that there would be another off yonder somewhere, wouldn't you?

A. There probably would; it is very often the case; you find one main fissure and the walls might right smack up against each other.

Q. Then you would find them both together?

A. Yes sir.

Q. But suppose the walls are ten feet apart—you would get to one wall, and you would say you found your vein, because if it was a fissure vein, you know there would be another wall on further somewhere?

A. Yes sir.

Q. But when you first come to a slight impregnation, which may exist, entirely distinct from the fissure, perhaps in the country rock, you would not say that you had discovered the vein?

A. That would be what the Cornish call a lead; that is their definition of a lead, when you find something that leads you down to your vein.

Q. But you haven't yet discovered a well-defined fissure, have you?

A. Not yet, no sir.

Q. Because that lead may lead to nothing; isn't it a fact that sometimes a part of the country rock distant from a vein, is
552 slightly impregnated?

A. Yes sir, sometimes it is.

Q. Isn't that very frequently found when a vein is never discovered?

A. I don't know as that would apply; any impregnation is generally close to a fissure.

Q. Without going into these matters, so far as the definition of a vein is concerned, there are innumerable definitions of a vein, are there not?

A. Yes sir.

Q. Given by geologists, given by miners, given by courts, and given by law-writers?

A. Yes sir.

Q. But don't all of those definitions presuppose, particularly if it

is a fissure vein, that there are boundaries known as walls to that vein?

A. Yes sir.

Q. I didn't exactly understand what you were talking about here, about the strike of this vein; this being the Tecumseh discovery shaft, what did you say the strike of that vein is?

A. About north; the main fissure in there is about north, that main crack.

Q. And all of these parallel fissures have the same strike?

A. Not exactly; they are not exactly parallel; it is an irregular cracking.

Q. What do you say the strike of this vein is?

A. It is about north, approximately north.

Q. Can you measure the strike of the ordinary joints that you find in porphyry, very well?

A. You can measure them, yes.

Q. How did you measure that strike?

A. I laid a board along, took the end of the board and put it in that way and put a compass on the side of it.

Q. How far from shaft No. 4, indicated there, or how near to that, would this vein pass on the strike that you have measured?

Q. I don't think it would ever get there at all; I don't think it would ever extend that far.

553 Q. It would get there if it is projected far enough?

A. If it continued it would get there.

Q. You measured the strike of something and undertook to give what it was?

A. Yes, the strike of these cracks.

Q. When you measure the strike of a crack you presuppose it goes on indefinitely, don't you?

A. No sir, I do not.

Q. The strike of a crack goes to the ends of the earth, don't it?

A. No sir.

Q. It is a mere imaginary line?

A. You asked me if I presupposed it went on.

Q. The strike I am speaking of; it goes on whether the crevice does or not?

A. Yes, the line of the strike would go on.

Q. I asked you how far the strike of the vein would pass from shaft No. 4?

A. I have not measured it; I can if you wish.

Q. If you will?

A. It would be 205 feet, according to that line I have drawn.

Q. Is that Tecumseh discovery shaft developed sufficiently to accurately measure the strike?

A. Yes, you can measure it as far as you can see it.

Q. You can measure it as far as you can see it?

A. That is, you can measure it in the shaft as far as you can see the crack in the shaft, you can measure the strike that distance.

Q. You mean you can measure the vein there and compute the strike or try to compute the strike of it?

A. You don't compute it; I had a pocket compass with me; a chronometer.

Q. Is the vein sufficiently developed along the course of the strike of the vein to accurately undertake to say where it would go for a mile further?

A. I said I didn't think it would go there at all.

554 Q. The strike will go there?

A. The strike will go, yes.

Q. I say is it developed sufficiently to tell where the strike of that vein will go to any great distance?

A. You can easily take it as far as it shows; that is not difficult at all to do; to take the strike as far as it is exposed; it is a very easy proposition.

Q. Did you see any such rock as that in the Tecumseh discovery shaft (handing witness)?

A. I don't know whether I did; there may be such in those horizontal seams; I would not be surprised if there was; that is merely an iron impregnation; oxidation and impregnation together.

Q. There is no mineral in that?

A. I don't know whether there is or not; I would not say that; I know there is iron in it.

Q. You say it is a mere iron impregnation?

A. Yes sir, and it would not surprise me at all——

Q. It would not at all argue that there was a vein there?

A. Not at all, not there; taking the other characteristics of those cracks into consideration.

Q. Did you see any such rock as that there?

A. I don't know; that looks something like the characteristic rock there; it does not appear to have enough brecciated material in this; it may have come from there; I would not say whether it did or not, but there does not appear to be enough breccia in it.

Q. What do you call that?

A. It is a porphyry rock.

Q. Any impregnation?

A. There is oxidized iron in it.

Q. Any quartz?

A. Possibly, yes; probably there is.

Q. Look at it.

A. There is probably quartz in it.

Q. In your opinion state whether there is quartz in it, or not.

A. Yes; I think there is some.

Q. Don't you think that will assay something?

A. I don't know; it might.

555 Q. Have you any opinion?

A. I would not express an opinion, if I wanted to know about things of that kind I would take it to an assayer.

Q. Do you mean to say that you are not miner enough to express an opinion at all, to satisfy yourself even, as to whether rock will assay from the looks of it?

A. I have been fooled too often, and paid too much to find out

generally, to say anything about Cripple Creek rocks; I thought I had ore a heap of time when I didn't.

Q. If you were in a mine and wanted to show the ore that would assay, you would probably take that kind of specimens in place of these, wouldn't you?

A. Yes, I would if there was any ore there.

Q. That looks a good deal more like ore, don't it, than this?

A. No, it don't look much like ore; that don't look like ore at all, and that don't look very much like ore neither; it may be, but it doesn't look much like it; still you can't tell by the looks of anything in the Cripple Creek district, on account of this impregnation of the country rock.

Q. You examined these crevices in the Tecumseh shaft, and expressed the opinion that there was no vein there?

A. Yes sir; it is not the characteristic vein formation of the camp.

Q. And you did that without examining these crevices?

A. I looked at them.

Q. Or assaying such material as that?

A. No, I didn't assay that; I was shown a line of assays which convinced me that there was nothing like that.

Q. Isn't it your experience that you can be shown most anything in that formation?

A. Mr. Doyle has done a great deal of work for me when I was mining, and I found him to be a very reliable man, indeed;
556 I have employed him when I was mining there, and I found him to be a very reliable assayer.

Q. If you should look into these crevices and pick out this kind of material, wouldn't you want to have it assayed before you would say there was no vein there?

A. If the general characteristics of the place had been different, then I would unquestionably want*ed* it assayed, but as a general rule that character of material in Cripple Creek does not carry much.

Q. It frequently carries mineral in appreciable values?

A. Gold is not intermediately associated with the iron in the Cripple Creek district, as a general rule.

Redirect examination:

Q. You have no knowledge, have you, where this rock comes from?

A. No sir.

Q. Whether it comes from the Tecumseh shaft or some other shaft?

A. No sir, I didn't see any such rock there, I know that.

Q. You were asked about the strike of the vein in the Tecumseh, and you answered that the strike of the vein was as given in direct examination; what do you mean by the term vein in connection with the Tecumseh shaft?

A. He called it a vein; he asked me about a vein; I don't call it a vein at all; it is a crack.

Q. In taking the strike, or attempting to take it, did you or not assume that which was exposed in the shaft, as giving the direction of the strike?

A. Yes sir, there was a board down there, and I laid it along the crack, and set my chronometer along the side of it.

Q. Was there any other development upon these cracks or veins, if veins they may be called, by which this direction could be determined, except that which appears in the Tecumseh shaft?

A. No sir.

557 Q. You were asked why you did not produce specimens at 25 feet from the Ophir shaft; as a matter of fact you brought no specimens here yourself from any portion of the property, did you?

A. No sir.

Q. I believe you said that you understood that the probabilities were the jury would go and see for itself?

A. Yes sir, that is what I thought about it.

558 Defendants then offered in evidence the location certificate of the Ophir Lode mining claim; the same is marked Exhibit "2," and is in the words and figures following:

559 STATE OF COLORADO, } ss:
County of El Paso, }

Know all men by these presents, that John Hubbard and J. E. Smith, the undersigned, have, this 18th day of April 1892 located and claimed, and by these presents do locate and claim, by right of discovery and location, in compliance with the mining acts of Congress, approved May 10, 1892, and all subsequent acts, and with local customs, laws and regulations, 1,500 linear feet and horizontal measurement on the Ophir lode, vein, ledge or deposit, along the vein thereof, with all its dips, angles and variations, as allowed by law, together with 150 feet on the easterly side and 150 feet on the westerly side of the middle of said vein, at the surface, so far as can be determined from present developments; and all veins, lodes, ledges or deposits and surface ground, within the lines of said claim 500 feet running N. 30° E. from center of discovery shaft, and 1,000 feet running S. 30° W. from center of discovery shaft; said discovery shaft being situate upon said lode, vein, ledge or deposit, and within the lines of said claim, in Cripple Creek mining district, county of El Paso and State of Colorado, described by metes and bounds as follows, to wit:

Beginning at corner No. 1, whence the N. ¼ cor. sec. 30 T. 15 S. R. 69 W. of the 6th P. M. bears S. 00° 50′ W. 247.5 ft. Thence S. 30° W. 750 ft. to center stake 1,500 ft. to cor. No. 2; thence N. 60° W. 300 ft. to cor. No. 3; thence N. 30° E. 750 ft. to center stake 1,500 ft. to cor. No. 4; thence S. 60° E. 300 ft. to cor. No. 1, the place of beginning, magnetic variation 13° 40′ E.

JAMES F. SMITH,
U. S. Dep. Min. Sur.

560 Said lode was discovered on the 3rd day of February A. D. 1892.

JOHN HUBBARD. [SEAL.]
J. E. SMITH. [SEAL.]

Attest: —— ——.

Date of location April 18th, A. D. 1892.
Date of certificate April 19th, A. D. 1892.

STATE OF COLORADO, } *ss:*
County of El Paso, }

I, J. W. Bates, county clerk and recorder in and for the aforesaid county and State, do hereby certify that the within and foregoing is a full, true and correct copy of location certificate of the Ophir lode, filed for record May 5, 1892, at 11.06 a. m. and was duly recorded in Location Record 4 at page 37 of El Paso county, Colo. records, made from the original record.

In testimony whereof I have hereunto set my hand and affixed my official seal, at my office in Colorado Springs, in said county and State, this 30th day of July, A. D. 1896.

J. W. BATES,
County Clerk and Recorder,
[SEAL.] By M. C. POWERS, *Deputy.*

Endorsed: Ex. 2. "Copy." Location certificate on the Ophir mining claim of John Hubbard, *et al.*, in —— mining district, —— county, State of Colorado. State of Colorado, county of El Paso, *ss.* I hereby certify that this location certificate was filed for record in my office at 11.06 o'clock a. m. May 5, 1892, and is duly recorded in Book 4, at page 37. F. W. Howbert, recorder.

561 Plaintiff objects, for the reason that said location certificate does not sufficiently describe the property.

Which objection was by the court overruled; to which ruling of the court, plaintiff by his counsel then and there duly excepted.

Defendants then offered in evidence, without objection, a mining deed, from John Hubbard to H. E. Smith, dated June 20th, 1892, conveying an undivided half interest in the Ophir lode.

Defendants then offered in evidence, without objection, a mining deed from J. E. Smith to Henry E. Smith, dated the 20th day of June, 1892, conveying an undivided one-half interest in the Ophir and Julie lodes.

Defendants then offered in evidence, without objection, a mining deed from Henry E. Smith to James J. Cone and Lyman Robison, dated March 25, 1893, conveying an undivided one-sixth interest in and to the Doctor, Chief, Julia E. and Ophir Lode mining claims.

Defendants then offered in evidence, without objection, a mining deed from the same party to the same parties, dated the 20th day of June, 1892, conveying an undivided one-third part to each of the above-named parties of the second part, making together two-thirds

of the Ophir lode, Julia E. lode and the Vulcan tunnel and tunnel site.

562 Defendants then offered in evidence, without objection, a mining deed from the same party to the same parties, dated the 24th day of February, 1893, conveying an equal undivided one-sixth part of the Doctor, Julie E. and Ophir lodes; also an equal undivided one-eighth part of the St. Thomas lode; also an equal undivided one-eighth interest in the Golden Wedge Lode mining claim.

Defendants then offered in evidence, without objection, a notice of intention to hold the Ophir lode for the year 1893.

Defendants then offered in evidence, without objection, a notice of intention to hold the said Ophir claim, for the year 1894.

Defendants then offered in evidence the affidavit of Henry E. Smith as to citizenship, which recited in substance that the said Smith was a native-born citizen of the United States, born in New Hampshire and over the age of 21 years at the time of the location of the said Ophir Lode mining claim; that his parents were native-born citizens of the United States, &c.

Plaintiff objects; but the court overruled said objection; to which ruling of the court, the plaintiff, by his counsel, then and there duly excepted.

And thereupon the defendants rested their case.

563 And thereupon, the plaintiff, to further maintain the issues herein in rebuttal, offered in evidence as follows, that is to say:

D. J. BRIDGE, being recalled for plaintiff in rebuttal, testified as follows:

Q. Mr. Bridge, you have heard, during the testimony, a shaft spoken of as a ten-foot shaft or about that a short distance south of the Ophir shaft?

A. Yes sir.

Q. Do you know who sunk that shaft?

A. I do not; it was apparently an old shaft when we went onto the ground first.

Q. Did the Ophir people sink it?

A. No sir.

Q. It had a discovery notice of somebody else?

A. It had a discovery notice.

Defendants object being not rebuttal and immaterial; it was brought out upon cross-examination of Mr. Smith that at one time he found a shaft near the discovery shaft of this claim; we have not claimed anything by virtue of it.

Objection overruled; defendants excepting.

Q. You say that had a discovery notice of some one else?

A. Yes sir.

Q. You heard Mr. Smith estimate some trenches done on the south end?

A. Yes sir.
Q. As a part of the work and improvements on the Ophir claim?
A. Yes sir.
Q. You may state who did this.

Defendants object for the same reasons, because immaterial and irrelevant, and a matter that was brought out on cross-examination, which objection was by the court sustained; to which ruling of the court, the plaintiff, by his counsel then and there duly excepted.

564 Gen. JOHNSON: I will offer to show by the witness that all of the trenches that were mentioned by Mr. Smith, as having been counted by him in making up the $500 worth of work and improvements on the Ophir claim to which he made an affidavit in support of the patent application of defendants, were made by the witness himself.

Defendants object; which objection was by the court sustained; to which ruling of the court the plaintiff then and there duly excepted.

Q. Mr. Bridge, were you acquainted with Mr. Hubbard and Mr. Smith who made the location of the Ophir?
A. I was acquainted with Mr. Hubbard; I don't know that I got acquainted with Mr. Smith.
Q. You may state whether or not those gentlemen did any work within the boundaries of the Ophir claim, except the sinking of the shaft that you measured in the fall of 1893?

Defendants object; this was all stated on cross-examination. Objection overruled; defendants excepting.

A. They did not so far as my knowledge goes.
Q. Were you on the hill in 1892?
A. I was working there.
Q. And familiar with the various work that was being done there?
A. Yes sir.

Mr. THOMAS: The same objection and exception.

(No cross-examination.)

565 EDWARD CARR, being first duly sworn on the part of the plaintiff, in rebuttal, testified as follows:

Q. Mr. Carr, you may state whether or not you have done any work in the Tecumseh discovery shaft within the last few days or within the last two or three weeks.
A. Yes sir, I have done some.
Q. Since your brother has been in Denver?
A. I did some work there last week.
Q. About how many shots were put in there?
A. There were four or five shots, five or six shots, possibly.
Q. Where were those put in?
A. They were put in on the north side facing the vein into the edge of the vein, and next to the hanging wall.

Q. On the north side of the shaft?

A. Yes, facing the north part; I put the shots in facing the north, facing the edge of the vein; that is, the north side of the vein.

Q. Did you sink the shaft any deeper than it was before?

A. No sir.

Q. About how far from the surface were those shots put in?

A. The first shot that I put in, I think was put in about twenty-two or twenty-three feet down from the collar of the shaft, probably.

Q. Then how far down?

A. From there down pretty near to the bottom, within four or five feet, probably, of the bottom.

Q. Where were those shots with reference to these crevices, whether it was between them or in one of them or where?

A. It was in the vein, as I would call it, and next to the hanging wall.

Defendants object; objection sustained.

Q. You may examine this piece of rock.

Defendants object to the introduction of any specimens, or
566 any testimony as to the existence of any specimens of rock taken from the Tecumseh shaft, because not rebuttal and absolutely cumulative; objection overruled; defendants excepting.

Q. You may examine these pieces of rock, these five pieces, and you may state whether or not these came out of the crevices in the Tecumseh discovery shaft; and, if so, at what point?

Defendants object because not rebuttal, immaterial and incompetent; objection overruled; defendants excepting.

A. They did; they came out of the Tecumseh discovery vein at about twenty feet from the collar of the shaft, around about there.

Q. Which crevice?

A. Close to the hanging wall, within six or eight inches, perhaps, of the hanging wall; and perhaps one or two of them came off the hanging wall.

Q. When were they taken off?

Defendants object for the same reasons; objection sustained, plaintiff excepting.

Q. You may state whether these specimens of rock resemble the crevice matter or the ore that comes from the immediate connection with these crevices.

Defendants object for the same reason; objection sustained, plaintiff excepting.

Mr. THOMAS: I object to the samples being exhibited to the jury for the same reasons, it is not rebuttal testimony.

Objection overruled, defendants excepting.

Q. Have you examined the work that was done upon the Ophir lode during the year 1897, or from the first day of January,
567 1897, up to the present time?

A. Yes sir.
Q. What work was done there during that period of time?

Defendants object; there is no forfeiture pleaded or failure to do any work in 1897, and no relocation made by virtue of that forfeiture.

The COURT: Do you want to show a forfeiture?

Gen. JOHNSON: They introduced proof to show that they had done it, and this is to rebut whatever purpose they had in view in introducing that.

Objection overruled, defendants excepting.

A. The only work that has been done of any moment, was in a drift in the south end of the south drift; they ran a drift there possibly seven feet and about six feet and a half long; it may possibly square up seven feet.
Q. Seven feet in length by what dimensions?
A. About four feet wide and over six feet high, about six feet six inches.
Q. When did you measure that work?
A. Yesterday.
Q. What is that work reasonably worth per foot?

Defendants object because incompetent. Objection sustained, plaintiff excepting.

Q. What experience have you had in the Cripple Creek district in driving drifts and doing work of that kind?
A. I have worked during the last two years practically all of the time.
Q. Do you know the reasonable value or cost of doing that kind of work in that kind of ground at that place on that hill?
A. I think I do, yes sir.
568 Q. What would you say that drift you are speaking of, of the size mentioned, what would it reasonably cost to do the work there and hoist the material, per foot?
A. I would consider it worth about eight dollars a foot.
Q. You may state whether or not in your judgment you could contract to have that kind of work done for that, or would be willing to contract to do it for that?

Defendants object, being incompetent and immaterial; objection sustained, plaintiff excepting.

Cross-examined by Mr. THOMAS:

Q. Mr. Carr, you are interested in that company, are you not?
A. In a lease on the Tecumseh, only.
Q. A lease and bond?
A. Yes sir.
Q. With the Tecumseh Gold Mining Company?
A. Yes sir.
Q. What is the extent of your interest in the lease and bond?
A. I own a fifth.

Q. Are you related to Mr. J. W. Carr?

A. Yes sir.

Q. When did you go up and put those shots in the Tecumseh shaft?

A. I did that at various times of last week; I don't know but that I worked there every day excepting possibly Saturday, more or less.

Q. Various times of last week?

A. Yes sir, but not all of the time, you understand.

Q. That is since this trial has been on before the jury?

A. Yes sir.

Q. Who told you to go up there and do that work?

A. Nobody.

Q. You were down here, were you not, at the commencement of this trial?

569 A. No sir.

Q. When did you first come to town in attendance upon this trial?

A. This morning at three o'clock.

Q. With whom were you in communication down here who was in attendance upon the trial?

A. I communicated yesterday with my brother, and I think I wrote him a letter some time during the week.

Q. Did Mr. Bruckman go up to Cripple Creek since the commencement of this trial, up to Anaconda?

A. Not that I know of, no sir; I have not seen him.

Q. Or Mr. Lynch?

A. No.

Q. What one of the witnesses connected with this trial has been to Cripple Creek or up to Anaconda or this property to see you since the commencement of the trial?

A. I don't think I have seen any of the witnesses; I know I have not.

Q. What induced you to go up and put these shots in that shaft?

A. The primary reason, I suppose, was to freshen up the rock there and make it as apparent to the jury when they should come there, as possible, that it was a vein, or that it was not a vein, so that they could see the texture of the rock.

Q. You knew the jury were going up there?

A. I expected so.

Q. And instead of leaving the shaft in the condition it was when this trial began you concluded to alter it, did you?

A. I did, yes sir.

Q. It needed altering in order that you might be able to see a vein?

A. No, it did not.

Q. What did you do it for, then?

A. As I said, to brighten and to freshen the vein matter.

570 Q. How many shots did you have to put in to brighten and freshen your vein?

A. Four or five or six.

Q. Well, was it four or five or six?
A. I don't know; it was five shots, more or less, probably.
Q. You know how many shots you put in there? Did you put more in there than you can count?
A. No.
Q. Did you drill these holes yourself or have help?
A. I drilled them all myself.
Q. You went up there of your own volition?
A. No sir.
Q. Nobody told you to go?
A. No sir.
Q. And put five or six shots in that shaft?
A. Yes sir.
Q. What part of the shaft did you put those shots in?
A. I put them in next to the hanging wall.
Q. On the north side?
A. On the north side of the shaft.
Q. Up in the northwest corner, didn't you?
A. Yes sir.
Q. How far apart were those up and down, those shots that you put in?
A. They were continuous; after shooting off on[illegible]ch, I put in another shot immediately below.
Q. Clear down to the bottom?
A. Pretty near to the bottom.
Q. How many tons of material did you blow out of that shaft?
A. I don't suppose I broke five hundred pounds of rock; I don't know.
Q How deep were your holes?
A. I don't know; I don't suppose I had a hole that was more than two feet deep.
Q. Did you have any that was less than two feet deep?
A. Not that I remember of.
Q. Then you have blown an insertion into the northwest
571 corner of that shaft about two feet deep from twenty feet of the surface clear down to the bottom?
A. Yes sir.
Q. And you freshened up your vein?
A. Clear down to within a few feet of the bottom.
Q. And that freshened it up, didn't it?
A. Yes sir.
Q. Did you put in any in the southeast corner to freshen up that part of it?
A. No sir.
Q. In the northeast corner?
A. That is the corner we are talking about.
Q. Did you in any corner but one of that shaft?
A. That is all.
Q. When did you report what you had done, down here?
A. To whom?
Q. Anybody?

A. I was trying to think this morning. I wrote a letter to my brother last week; but I don't know whether I mentioned the fact to him or not; and if I did not, then I told him yesterday what I had done, by telephone; I had a talk with him over the telephone.

Q. Why did you wait until this trial began, and the defendants' witnesses were all down here before you did that work?

A. The immediate reason was that in breaking any rock the fresher it is after the shots the better you can tell the rock.

Q. And you wanted it as fresh as possible before the jury saw it?

A. I did, yes sir.

Q. So you began some time after this trial began and then put in your shots day after day until this time?

A. Yes sir.

Q. You took your time about it?

A. I did.

Q. You were afraid they couldn't see it if you didn't do that?

A. No, I had no fear of that at all.

572 Q. Did you do it for fun?

A. No sir.

Q. These pieces of rock that General Johnson called your attention to you took from the part of this shaft that you shot out, didn't you?

A. I don't know that I did.

Q. Did you want the jury to see some old rock that was not fresh?

A. This was pretty near as fresh as the freshest of the rock that is there.

Q. But not quite?

A. If you will allow me, I will tell you where I did take that from.

Q. I will allow you.

A. I think that came entirely from the bottom of a hole which my brother put in perhaps a month ago.

Q. That is how many feet from the collar of the shaft?

A. That is about twenty feet.

Q. You began right under that shot, didn't you, with your first shot?

A. Yes sir, immediately under that shot.

Q. And continued them on down?

A. Yes sir.

Q. Nobody knew anything down here about what you were doing up there?

A. Not to my knowledge; I didn't communicate with anybody.

Q. Did you take any of that rock to an assayer?

A. Yes sir, I did.

Q. To whom?

A. I took two samples to Mr. Bruckman, I took three samples, I guess.

Q. When?

A. About ten days ago.

Q. Then Mr. Bruckman was up there after you began this shooting?

A. No.

Q. Did you take any rock to Mr. Bruckman that you blew out of there with blasting?

A. No, I don't think I did; no, I know I did not; the rock I took to Mr. Bruckman that I just referred to, came out of the
573 bottom of this first hole that my brother put in a month ago.

Q. Was he there when you took it?

A. Who?

Q. Bruckman?

A. No, he was not; I was alone.

Q. Did you take any of that rock and bring it down here and give it to any assayer since you arrived here this morning?

A. No sir.

Q. Did you do any work in the Ophir shaft?

A. Yes sir.

Q. What work did you do in there?

A. I put in two platforms in there for the jury to stand on, yesterday.

Q. Did you do anything besides that?

A. No sir.

Q. Did you put in any hole there to freshen up things?

A. No sir.

Q. Did you do any sort of work on the walls there?

A. In the Ophir shaft?

Q. Yes?

A. I did not, except cutting niches for the platform.

Q. Who told you to do that?

A. My brother told me.

Q. When?

A. I think he told me in reply to this letter that I speak of, perhaps a week ago.

Q. Then you have received some communication during the course of this trial, have you?

A. From him?

Q. Yes?

A. Yes sir, I received, I think, that one letter from him, or rather, not from him but somebody else who must have written that letter because he can't write at present.

Q. Where are those platforms?

A. One of them is about twenty-nine feet down from the collar of the shaft; the other one is about four feet below the point where the vein comes into the shaft first.

Q. Did you notify any of the Ophir people that you were going to put the platform in there?

A. No sir.

574 Q. Did you ask permission of anybody to do it?

A. No, sir.

Q. You waited until this case began and the defendants were down here and then you did it of your own volition?

A. I waited until I concluded the Ophir people were not going to put it in shape; those were my instructions, that was yesterday.

Q. Why did you conclude that?

A. What?

Q. Just what you said; didn't you say that you waited until you concluded the Ophir people were not going to put the platform in?

A. Yes, sir.

Q. Why did you conclude that?

A. Simply because I thought the jury would be there today; I received a letter, the letter I speak of receiving, in which I heard from my brother; it was written by Pat Lynch, three or four days ago, at the beginning of this case, and he told me at that time, in that letter, if you care to hear this, that the case would be finished by Saturday night, and that if the Ophir people did not put in that platform I should do it before the jury got there.

Q. Then you got a letter from Mr. Lynch as well as Mr. Carr?

A. No sir, that is a letter written by Mr. Lynch for himself and Mr. Carr.

Q. I thought you said your brother wrote it?

A. No, I told you my brother could not write and has written no letters for a long time, since he hurt his eye.

Q. When did you tell me that before?

A. A few minutes ago.

Q. Did you go to the Ophir people and ask them if they were going to put in any platform?

A. I did not.

575 Q. Do you know whether any application was made by the court for an order permitting you to go there and put in platforms?

A. No sir.

Q. You got the Tecumseh shaft all right, and got the Ophir shaft all right?

A. I think so.

Q. And then came down here to testify?

A. Yes sir.

Q. When did you go down and examine the amount of work that had been done in regard to the assessment of 1897?

A. I've been down there once or twice; I was down there yesterday evening.

Q. Who told you to go down and measure?

A. My brother.

Q. Did you get another letter from your brother?

A. No sir.

Q. How did you communicate with him?

A. By telephone.

Q. What did you measure with?

A. A tapeline.

Q. You said that the distance was possibly seven feet or six and a half feet long; which was it?

A. I can't swear exactly.

Q. Why can't you?

A. Simply because the face of the drift is not square so that you cannot take the mathematical linear length of the drift; you have got to square it up and make a sort of estimate of the face.

Q. Did you know where the work began?

A. I knew about where it began, yes.

Q. Did you know where it began?

A. I knew within a few inches.

Q. How?

A. I have been in there a number of times before this work was done, and I knew the shape of the drift and about where the work must have begun.

Q. You made a guess of it, in other words?

A. No, I didn't.

Q. Will you swear that you began to measure the work at the point at which this work commenced?

A. Not exactly, the point, no sir.

576 Q. Will you swear that you came within a foot of it?

A. Yes, I would.

Q. You think you did?

A. Yes sir.

Q. Did you see any other work there except this six and a half or seven feet?

A. When do you mean?

Q. What I say?

A. There is a drift there from the shaft thirty or forty feet long outside of this six feet and a half drift that I speak of.

Q. Do you know how long that drift was before this work began in December 1897?

A. I never measured it, no sir.

Q. That was merely a matter of estimate?

A. Yes sir.

Q. Did you see any ladders in the shaft?

A. Yesterday?

Q. Yes?

A. No.

Q. How many feet of new ladders did you see in the shaft?

A. I didn't see any.

Q. You said you saw some new ladders in the shaft?

A. New ladders?

Q. You said you did?

A. I would like to know when I said it?

Q. You didn't say you saw some new ladders in the shaft?

A. No, I did not.

Q. Do you tell the jury that you did not say within a minute that you saw some ladders in the shaft?

A. I can say if I did I must have been sleeping for about a second.

Q. Are you in the habit of going to sleep for about a second on the stand?

A. No sir.

Q. Pretty wide-awake?

A. I mean to say to the jury that I never said that there were any new ladders in that shaft.

Q. You are just as positive of that as anything else you
577 have sworn to?

A. Yes sir.

Q. Did you see any ladders in the shaft that were not there prior to the first of December, 1897?

A. I didn't see any, no sir; if there is anything new there they have been changed, the same identical space has been covered by another ladder.

Q. When you went into the Ophir shaft to put in these platforms and to measure this work, did you see whether the shaft looked as it did at the time of the commencement of this trial, or at the time of the ending of the last trial?

A. In the Ophir shaft?

Q. Yes; is it practically the same shaft that was there at the last trial?

A. It is very nearly the same shaft, but I did see some difference, some work that had been done there since the last trial.

Q. Where was that?

A. That was just above the point where this vein comes in.

Q. What did the work consist of?

A. I should say that somebody had taken a moil and chipped off certain slips along the east side of the shaft, and also another slip on the south end or southeast end.

Q. You think that change has been made since the last trial?

A. I could not positively swear to that.

Q. Fresh work, was it?

A. No, it didn't look fresh; I should say it had been done for some time.

Q. How long?

A. Not within a few days.

Q. Did you report that when you came down this morning, too?

A. I don't think I said anything about that.

Redirect examination:

578 Q. As I understand you, you put these platforms in the Ophir shaft to make it more convenient for the jury to examine this disputed point in the shaft?

A. Yes sir.

Q. Did you not do the same thing for the last trial?

A. I did.

Q. And haven't the Ophir people taken those stulls out there that you put in at the last trial?

A. They have all but one; there is one stull left there.

Q. When did you put these stulls in?

A. Yesterday.

Q. From all appearances it didn't look as though they were going to furnish facilities for examining that shaft, did it, yesterday?

Defendants object as being leading. Objection sustained.

Q. Did you intend to come down and be a witness in this case at all until you were telephoned for yesterday?

A. I didn't anticipate it until last evening at half past five.

Q. These shots that you put in there on your own responsibility, as you state, do they make the formation there any different than what it was before?

A. Not a particle.

Q. You didn't shoot any vein in there did you?

A. No, not a particle. There is not an edge of any vein exposed in that shaft that was not exposed there before I touched it. I worked entirely on that edge of the shaft and did not bring anything into it that was not there before.

Q. In other words, you exposed the vein a little more plainly, and as it would have looked some time ago when the work was fresh?

A. Yes sir.

Recross by Mr. THOMAS:

Q. You say the Ophir people removed the platforms that
579 were there at the last visit of the jury? Didn't you go there after that trial and take possession of the shaft and plank it over so that nobody could get into it until you were ordered by your counsel to desist?

A. No, I did not.

Q. Didn't you have it done?

A. I did not.

Q. Didn't you know it was done?

A. Yes sir.

Q. By the Tecumseh people?

A. By my brother.

Redirect:

Q. Let's have fair play here; wasn't that after a verdict of a jury and a judgment in our favor for possession of the property?

A. Yes sir, and on the apprehension that the property belonged to the Tecumseh people.

Q. And that we had judgment for it and that there had been no appeal from it?

A. Yes sir.

(By Mr. THOMAS:)

Q. And pending a motion for a new trial and payment of costs?

A. I don't know anything about that; the shaft was opened up about a week afterwards.

580 J. W. CARR being recalled for plaintiff in rebuttal, testified as follows:

Q. Mr. Carr, did you hear the statement of Mr. Dahl to the effect that when you sunk the discovery shaft, or shaft No. 4, you sunk down through and broke into and sunk through their drift?

A. Yes sir.

Q. Is that true?

Defendants object, because not rebuttal, which objection was by the court sustained; to which ruling of the court, plaintiff then and there duly excepted.

Ruling withdrawn and objection overruled; defendants excepting.

Q. I heard it, yes sir.

Q. What is the character of the surface ground there with reference to elevation as between the discovery shaft and No. 4?

Defendants object, being incompetent and not rebuttal.

Objection overruled, defendants excepting.

Q. The elevation of shaft No. 4 of the Tecumseh is somewhere between 75 and 100 feet I should say higher than the discovery shaft.

Q. Did you hear the statement of Mr. Moore and Mr. Darby to the effect that the strike of the vein would leave shaft- No. 4 and No. 2 and No. 3 more than 100 feet away from that vein on the strike?

Defendants object for the same reason; objection overruled, defendants excepting.

Q. Yes sir.

Q. Is that true?

Defendants object, being improper.

The COURT: Ask him if that is a proper description of the strike?

581 A. No, it is not.

Defendants move to strike out the answer.

Q. Would any of these workings be beyond 150 feet from that vein projected on its strike?

A. I should think not.

Q. How far would the furthest of them be away from that vein?

Defendants object for the same reason; objection overruled, defendants excepting.

A. I should judge, if you make allowance for the apex of the vein being carried to the east, from the fact that it travels up hill and its dip is west, it would naturally carry its apex as it goes up an elevation to the east, that probably the apex would miss the furthest shaft which would be shaft No. 2, about 60 feet probably.

Q. How far would it miss shaft No. 3?

A. About an equal distance.

Q. Are you familiar with the kind of rock that is disclosed in the discovery shaft and in the drift from it?

A. Yes sir.

Q. What experience have you had in running drifts and sinking shafts and contracting for such work upon that kind of ground?

A. I have done several hundred feet of work in that immediate locality.

Q. Is the material in that shaft different from what it is in shaft No. 4?

A. Not on the same levels, no, it is not.

Q. How is it with reference to depth, does it get harder or softer ground as you go deeper?

A. No, the best breaking ground we have is in the bottom at the 180-foot level.

Q. What would be the reasonable value of the work of breaking and hoisting rock such as is found in the south drift from the Ophir shaft, calculated per foot?

Objected to, being irrelevant, immaterial, incompetent and not rebuttal.

582 Objection overruled, defendants excepting.

A. I should think about $8 a foot; I will contract on the same level——

Defendants object; objection sustained.

Q. Did you ever do any contracting for that kind of work at that rate?

Defendants object, being incompetent and immaterial, which objection was by the court sustained; to which ruling of the court the plaintiff then and there duly excepted.

Q. Would that be the reasonable current value of that work?

A. I think so, yes sir.

Q. $8 per foot?

A. Yes sir.

Q. I will ask you to state whether or not drifting is not less expensive than sinking?

A. It is.

Q. About what difference do miners and contractors make between sinking and drifting?

Defendants object being immaterial and irrelevant; which objection was by the court sustained; to which ruling of the court the plaintiff then and there duly excepted.

Cross-examined by Mr. THOMAS:

Q. What is the difference in the elevation of this mountain between the Tecumseh shaft No. 4 and a point opposite at the side line of the Tecumseh shaft, the west side line; what is the difference in elevation?

A. What is the distance and I can tell you nearer.

Q. I should say, looking at your map, that it is approximately 175 feet, if I am any judge?

583 A. Directly west of it, that would intersect it at right angles; there is a difference in that ground, whether that line would intersect the west side line at right angles or whether it would be drawn from the west from the shaft.

Q. What is the difference in the elevation of the ground at the collar of the shaft No. 3 and a point directly west of it 175 feet?

A. I should judge about 30 feet; 25 or 30 feet I should judge.

Q. What did you say the difference was between the collar of the Tecumseh shaft and the collar of No. 4 shaft?

A. I should say somewhere in the neighborhood of between 75 and 100 feet.

Q. What is the difference in the elevation of the collar of the Tecumseh shaft and your south end line?

A. These are only estimates.

Q. I understand?

A. The collar of the Tecumseh working shaft?

A. No, the discovery shaft and the south end line?

A. I would say that it was perhaps 100 or 125 feet.

Q. If the rise of the hill swings your apex easterly going up the hill, it will swing it westerly going down the hill, won't it?

A. It certainly will.

Q. How did you take the direction of the vein from the Tecumseh discovery shaft?

A. Just from its appearance; just from the appearance of the portion of it that is exposed in the shaft.

Q. Did you use a compass?

A. No sir.

CHARLES HARRIS, being recalled for the plaintiff in rebuttal testified as follows:

Q. Mr. Harris, I believe you said you made that map?

A. Yes sir.

Q. From an actual survey on the ground?

A. Yes sir.

Q. You may state whether shafts No. 1, 2, 3 and 4 are properly laid down in that map?

A. They are.

584 Q. You may state whether or not any one of those shafts, that is No. 2, 3 or 4 would be thrown outside of a line 150 feet and running parallel to the strike of the vein, as it is shown in the discovery shaft?

Defendants object being incompetent and not rebuttal; objection overruled, defendants excepting.

A. I think shaft No. 3 would be the only one.

Q. Just examine the map there and see whether that would be more than 150 feet away from the strike of that vein?

A. I would have to scale that upon the map.

Q. You have a right to do that?

Defendants object for the same reasons; objection overruled, defendants excepting.

A. It is very close to 150 feet, possibly a little bit inside, but it is very close to it.
Q. To what shaft is that?
A. Shaft No. 3.
Q. Which side of the 150 feet from that strike would shaft No. 2 come?

Defendants object for the same reason; objection overruled, defendants excepting.

A. It would come on the same side.
Q. How far from the strike?
A. A little less than 140—shaft No. 2.
Q. How far would shaft No. 4 be from that strike?

Defendants object for the same reasons; objection overruled, defendants excepting.

A. Pretty close to 50 feet, a little less perhaps.
Q. What method of calculating the strike of that vein did you make?

Defendants object for the same reason; objection overruled, defendants excepting.

585 A. I took the true bearing with a transit, of the vein, and established the course of the vein by putting a plank across the shaft from wall to wall where it showed on opposite sides of the shaft and then taking the course of the edge of the plank.
Q. Is there any particular name for that process of measuring?
A. I simply took the course from the sun, not using the needle.
Q. From the sun?
A. Yes sir.

Mr. THOMAS: The same objection to all these questions.

Q. Is that considered the most accurate way?
A. It is the only accurate way.
Q. That is the accurate way?
A. Yes sir.
Q. In making that calculation, did you also calculate the dip and the elevations?

Defendants object for the same reasons.

A. No, I took the dip by offset and measuring; you cannot get the dip of anything from the course; the sun will only give the course; it will not give the dip.
Q. I mean did you base your calculations in making any allowances for the dip of the vein and the elevation where the apex would appear on the surface?
A. I just gave the strike of the vein on a level line.
Q. If you made your calculations that way would not the apex

of the vein as you went up the hill throw it nearer these shafts than any calculations you have made?

A. It would.

Q. If the dip of the vein was 12 degrees, and shaft No. 4 is 75 feet or 100 feet higher up the hill than the discovery shaft, how much would that throw the apex of the vein proper on the surface towards the shaft?

Defendants object for the same reasons; objection over-
586 ruled defendants excepting.

A. In running uphill every degree of dip will throw a vein about 2 feet, a little less than two feet for every 100 feet of rise; it is calculated at a foot and .78 departure and that is multiplied by the number of degrees, 12 degrees, which would be about 24 feet in 100 feet rise.

Q. Have you ever examined the Ophir shaft?

A. Yes sir.

Q. When?

A. Last May I think it was.

Q. Did you take any rock from it to be assayed?

Defendants object because not rebuttal; objection overruled, defendants excepting.

A. I did; I assisted in doing it; I did not do it all alone.

Q. With whom did you take that rock?

A. Mr. Wynckoop.

Q. You may examine that certificate; will you state where you took that rock from that produced these assays?

A. I cannot identify the result of that certificate as the actual samples I took out of the mine, because I did not have the charge of that from the time I took them out of the ground until the assay was returned, but this is the certificate that was shown to me as the result of the rocks that I took out of the ground.

Q. To whom did you intrust the samples?

A. To Mr. Wynckoop.

Q. For the purpose of having them assayed?

A. Yes sir.

Q. You may state whether or not you and he were there together, to examine that shaft for the purpose of testifying upon the former trial?

A. We were, yes sir.

Q. You may state where sample No. 2 came from?

A. Sample No. 2 came from a point in the shaft or a location in the shaft about 25 feet below the surface, between 24 and 25 feet, not much above nor much below that; it was about that elevation in the shaft.

587 Q. Where did sample No. 1 come from?

A. At a point in the corner of the shaft, the east corner of the shaft, at a point 34 feet from the surface.

Q. Will you describe that shaft to the jury?

Mr. THOMAS: I suppose one objection will suffice?

The COURT: Do you object to all this testimony?
Mr. THOMAS: Yes sir.
Objection overruled, defendants excepting.

A. The shaft is about three and a half by seven feet, timbered down about 16 feet, and is in what is commonly called porphyry, and in going down the shaft, at a depth of 34 feet from the surface in the east corner of the shaft—I call it the east corner because the shaft is diagonal with the points of the compass; if the length of the shaft was considered northerly and southerly, it would be the south-east corner, and there appeared what was clearly distinct a well-defined wall, and about two inches from it another well-defined wall, showing clearly a distinct vein about the thickness of two inches, that had a slight dip to the westerly, and in going down the depth of the shaft to about the 70-foot point I think I measured it 69 and a half, but owing to the irregularities in the bottom I would not be exact as to the exact depth of the shaft, the vein had entirely crossed the shaft and appeared on the other side; at that 34-foot point where the vein first appears was where I picked out this first sample, and that was taken right in between these walls two inches apart in that shaft.

Q. Is it your opinion that a well-defined vein appears in that shaft at the depth of 34 feet from the surface?

A. Yes sir, I should think there was.

588 Q. How far above there, if at any place, does it appear?

A. I cannot find any indication of a vein above that point.

Q. Does or does not the vein appear to pass right into the side of the wall of the shaft and disappear?

A. Apparently it disappears right there in the corner of the shaft at that point.

Q. At 34 feet?

A. I should say it was two or three inches nearer the surface now, because there has evidently some little samples been picked off there, and the feather edge of the rock shows it is picked away a little, probably in sampling, and it may be a few inches higher than that now.

Q. At the former trial of this case was there not a shoulder there apparently broken off, as the shaft came down under which this vein seemed to run and disappear?

A. It looked very much as if the shaft in being sunk this way, when it had gotten down to a point here just above the vein that the last shot had broken in a little bit and exposed the vein here, but then the vein was clear cut down on the incline from there.

Q. You may state whether or not in your opinion the shaft contains any discovery of a vein above 34 feet?

A. Nothing that I could see.

Q. Did you hear the statement of some of the witnesses on the other side to the effect that the veins disclosed in the Tecumseh discovery shaft are the common cracks found generally in the porphyry over there?

A. Yes sir.

Q. Is that correct?

Defendants object; objection sustained, plaintiff excepting.

589 Cross-examined by Mr. THOMAS (Harris):

Plaintiff offered in evidence, without objection, the section plan of the Tecumseh shaft.

Q. Mr. Harris, when did you make the calculation of the direction of the strike of the vein in the Tecumseh discovery shaft; was it before the last trial?

A. I think it was just before the last trial; I don't remember the day of the month.

Q. Did you use a compass in making your calculation?

A. I used a transit; it has a compass on it, yes sir.

Q. How did you take the course?

A. By deflecting the courses from a true meridian.

Q. And then laying a plank you say across the vein?

A. In the shaft, yes sir.

Q. Which one of the four veins that you testified the other day to be in that shaft, did you take the strike of?

A. I took the hanging wall—the westerly wall.

Q. What you took then was the westerly wall of the shaft?

A. Yes.

Q. At what point below the surface did you take it?

A. About 20 feet.

Q. Did you take any other of the veins, or cracks in that shaft?

A. No sir.

Q. Why didn't you take the others?

A. I thought that the veins were so nearly parallel that there was no necessity of taking them.

Q. Are they parallel?

A. Very nearly so, as near as I can judge by the eye; I did not measure them.

Q. Don't the cracks or fissures lying to the east of the hanging wall, approach the one immediately under the hanging wall, as they go northward?

A. It struck me that they were nearly parallel as I looked at them; they might approach it slightly.

590 Q. Who was with you when you made that calculation?

A. Mr. Wynckoop and Mr. Carr were present I think; it was at the time Mr. Wynkoop and I were together.

Q. Did I understand you to say that the vein would be thrown east, a distance of 24 feet beyond the line that appears in the shaft, at the point where it reaches the Tecumseh shaft No. 4, if that shaft were 100 feet higher?

A. No, a rise of 100 feet above a certain elevation; 24 feet would be about the distance of diversion from the vertical.

Q. If the rise is in the direction, in a mathematical line, of the strike of the vein that would be true, wouldn't it?

A. Yes sir.

Q. But suppose that the rise is only gradual from a point here north, then what would be the result?

A. The result would be that the vein would not rise quite so high before it reached the surface; hence the apex would not be thrown so far.

Q. Is it not a fact that the hill rises northwardly as well as northeasterly?

A. It does, but not quite so rapidly.

Q. But still it rises?

A. It rises, yes sir.

Q. And it also falls both southerly and southwesterly, don't it?

A. Yes sir.

Q. And the result would be, as it falls southerly and southwesterly, that the strike of the vein in that direction would be thrown further to the west?

A. Further to the west.

Q. Now assuming a line drawn north and south through that shaft, would the Tecumseh shafts 2, 3, 4 or either of them be within 150 feet distant from that point?

A. Apparently not; I don't think they would.

Q. When did you take these samples from the Ophir shaft?

591 A. I went there different times prior to the other trial.

Q. And this is the same certificate that was used at the other trial, is it not?

A. Apparently so; it looks the same, yes.

Q. Did you take those two samples yourself?

A. I picked them out of the ground myself, yes.

Q. Did you take any samples between the 24 and 34 foot point, where those two came from?

A. None.

Q. Why not?

A. Only two samples was all I took.

Q. Why didn't you take any between?

A. The vein at the 34-foot point is clearly distinct, and above that point I could see nothing to indicate a vein or any reason for taking any more.

Q. Yet you took a sample at the 24-foot point?

A. I took a sample at the 24-foot point.

Q. What did you do that for?

A. For the reason that I knew that the shaft was about that deep at the time of the first working, and I did it to see whether there was any indication of a vein at that point.

Q. How much material did you take for the No. 2 sample?

A. An ordinary sample in a small sack; probably a pound or two.

Q. Did you give it to Mr. Woodward or Mr. Wynckoop?

A. I gave it to Mr. Wynckoop.

Q. And he gave it to Mr. Woodward, so far as you know?

A. So far as I know.

Q. Did you take any other sample from that shaft that were assayed, except these two?

A. No sir.

Q. I believe you said when you were on the stand before that veins in this section of the camp occurred generally in seams or fissures, parallel to each other?

A. It is commonly the case.

Q. It is a common occurrence?

A. Yes sir.

592 Q. Where you find one, you are apt to find others, parallel?

A. Frequently so.

Q. Do you know of any reason why that rule would not apply to the Ophir shaft?

A. None whatever.

Q. Did you notice any difference in the texture of the rock, as to hardness or softness at the 24-foot point, between what you find it at the 34-foot point?

A. No sir.

Q. What portion of the shaft is represented by this section?

A. The east side and a portion of the north end; I could not give it all.

Q. As though the shaft were cut diagonally?

A. Diagonally, yes.

Q. And looking northward instead of looking southerly, as in the case of Mr. Moore's section?

A. Yes sir.

593 E. C. WOODWARD, being recalled for the plaintiff in rebuttal, testified as follows:

Mr. THOMAS: I will admit that Mr. Woodward will swear that they are correct assays, as he did before.

Q. Is that your assay?

A. It is.

Q. For whom did you make it?

A. Mr. Wynckoop or Mr. Harris, they were both in there at the time.

Q. Is that in your judgment the assay that was introduced on the other trial of this case?

A. I did not see that certificate on the other trial.

Q. Didn't you identify it on the other trial?

A. I don't remember that I did.

Mr. THOMAS: I will admit that he did.

Q. You were a witness on the other trial, were you not?

A. I was.

Q. That assay is correct according to the material that was given to you?

A. Yes sir. (Referring to Exhibit P.)

Q. And you rendered this assay to Mr. Wynckoop?

A. I did.

Q. By what process did you make it?

A. Fire assay; crucible assay.

(No cross-examination.)

W. C. WYNCKOOP, being recalled for plaintiff in rebuttal, testified as follows:

Q. You may examine that paper, please (Exhibit P).

Mr. THOMAS: To save time it may be understood that the same objections are made to this line of testimony, and I will save the exception.

The COURT: Yes sir.

Q. You may state what material it was that you had assayed?

A. It was material picked down by Mr. Harris from the
594 Ophir shaft which we together tied in sacks, which I delivered to Mr. Woodward, just as Mr. Harris testified to, from the places he testified to.

Q. Was that taken from the Ophir shaft?

A. That was taken from the Ophir shaft.

Q. The Ophir discovery shaft?

A. Yes, what they call the Ophir discovery shaft.

Q. At what distance was No. 1 taken from the collar of the shaft?

A. 34 feet.

Q. At what places were the rocks composing sample No. 2 taken?

A. We measured down 25 feet and got one, and then samples were taken clear around the shaft, as near as we could with reasonable accuracy keep the same level. It was probably between 24 and 25 feet.

Q. In the sample clear around the shaft did you find any difference in the rock at all?

A. I could see none.

Q. Either in its appearance or hardness?

A. Nothing except where there was some little soft seams running diagonally, a very faint trace of fracture planes.

Q. You may explain to the jury what you mean by a fracture plane or joint in the porphyry; I would like to have you go on and describe that shaft if you will?

A. That shaft is about three and a half by seven or seven and a half, probably timbered for 16 feet from the surface, after which there is a ladder way down to the bottom; we measured it 69 and a half feet to the bottom of the shaft. To the depth of 34 feet it is in the ordinary solid grey porphyry looking like that, without any joints, but with what is called fracture planes, little seams running three or four, diagonally, in various directions, such as all eruptive rocks have; there was no sign of any joint or vein until 34
595 feet is reached, where there enters the shaft a small, two-inch, clearly defined vein of dark material, dark ore, which has a dip from that to the bottom, as we measured it, of 8 degrees, starting in at the southeast corner of the shaft, crossing it, appearing and going into the outer side at the bottom of the shaft on the opposite side of the shaft.

Q. Can any one readily trace with the naked eye, that is any one that has got good eyes, that vein from the bottom of that shaft up to this 34-foot point?

A. Very clearly, standing in the bottom and looking up where the light is falling down, you can trace the vein, and see it distinctly up to the 34-foot point.

Q. You may state whether or not it there disappears from the shaft?

A. It does; it goes out of the shaft.

Q. Does it make its appearance in the shaft at any point above there?

A. No sir.

Q. In your opinion is there anything that could be pronounced a vein, or the discovery of any vein in that shaft above 34 feet?

A. There is not.

Q. What are the veins of Cripple Creek generally?

Objected to because not rebuttal; which objection was by the court sustained; to which ruling of the court, the plaintiff then and there duly excepted.

Gen. JOHNSON: I will offer to prove by the witness, in rebuttal of the testimony of Mr. Darby, that the formation of the Cripple Creek district is a layer of porphyry that is in depth over 200 feet or more, and that that layer of porphyry rests upon granite, and that substantially all of the veins discovered in that district are what are known as gash veins, which usually only extend to the granite.

596 Which offer of proof was by the court refused; to which ruling of the court, the plaintiff then and there duly excepted.

Q. Will you examine these three pieces of rock; did you hear the testimony of Mr. Carr that these samples of rock were taken out of the crevices found in the Tecumseh lode?

A. Yes sir.

Q. What is that rock?

A. Andisite; commonly called porphyry.

Q. Is that the kind of rock that lies adjacent to these crevices or in them?

A. Not in the crevices; it is the country rock that lies right adjoining the crevices.

Q. Will you examine these specimens of rock?

A. Yes sir.

Q. Will you tell the jury what they are?

A. That rock is composed evidently on one side of crevice material, the other side——

Mr. THOMAS: Is that the sample of rock that was shown to the witness Carr?

Gen. JOHNSON: Yes.

Defendants object to the introduction or using of this rock, because not rebuttal.

Objection overruled; defendants excepting.

A. That dark piece may be out of one of those crevices. That may and may not be out of the crevices; there are places in there

that are discolored very much as that is, but it probably is out of one of those crevices which are in that shaft. And that is evidently a piece of country rock and a sample possibly of one of those thin crevices showing the vein between the crevice matter and the country rock where it is what a miner calls frozen.

Q. Is there any quartz in any of those?

A. It is very silicious, and hard, and it is what a miner would call quartz, on account of its having more silica by far than
597 the country rock adjoining it. It is not scientifically pure quartz, but it is what a miner calls quartz.

Q. Is that the kind of quartz that you said you could go and point out and take out of there *are* assay?

A. Yes sir, that is the character of material which I said will assay.

Objected to because not rebuttal.

WITNESS: There is another piece showing the dark seam or vein broken out of the country rock with the country rock attached to it; this I would say is the country rock, and this the vein matter, hard, quartzy vein matter. This is a piece of pure feldspar taken out of the vein; it sometimes occurs in crystals in this large andisitic family; it don't necessarily have any particular bearing upon the vein one way or the other. This is a piece of silicious hard quartzy stuff; I don't know whether it is out of the vein or not; I could not tell.

Q. I am not asking you anything about whether any of these are out of the vein, only their characteristics?

A. That is a hard silicious quartzy piece of rock, such as can be found in that shaft in or adjacent or right adjoining those seams.

Q. Speaking of the Ophir discovery shaft; here is a sample of rock from the drift below; is there any such rock as that, or anything of that color or description above the 34-foot point in that shaft?

A. No sir.

Q. Have you got any sample of rock with you that you took out of the Tecumseh crevices?

A. I have.

Q. Will you produce it.

Defendants object; which objection was by the court sustained; to which ruling of the court plaintiff then and there duly excepted.

598 Gen. JOHNSON: I present herewith a piece of rock, which I ask the stenographer to mark as an exhibit in the case (Exhibit 6) and offer to prove that it came out of one of the crevices in the Tecumseh shaft, and that it is mineral-bearing rock, and I offer this in rebuttal of the testimony of Mr. Moore and to contrast the same with the two samples of rock which he produced, and which were introduced in evidence in defense, and ask that these samples be also marked by the stenographer as exhibits in the case.

Defendants object because not rebuttal; which objection was by

the court sustained, to which ruling of the court the plaintiff then and there duly excepted.

Cross-examined by Mr. THOMAS:

Q. Mr. Wynckoop, have you been up to these properties since you were on the stand before?

A. Yes sir.

Q. When did you go up?

A. In December.

Q. I mean since you were in the stand last week?

A. No, not since I have been on the stand this time.

Q. You say the Ophir shaft is sunk in ordinary gray porphyry without any joints, but what the authorities call fracture planes?

A. Yes sir.

Q. What do you call fracture planes?

A. I cite the authorities that I speak of; there are two series or kinds of fractures in rock, especially volcanic rock, which they are inclined to give two different names to; these which are approximately vertical and horizontal or at right angles to one another, or approximately so, are classed as joints; then there are little streaks two or three feet long like this, evidently having been fractures of some kind, but they are shorter and running in all sorts of different directions, not continuous at all, which they define as a
599 fracture plane, different from a joint; I rather like the classification and I use it.

Q. Are the fracture planes to which you refer vertical or horizontal or both?

A. They are at all sorts of angles.

Q. Were there any vertical fracture planes in the Ophir discovery shaft above the 34-foot point?

A. There was one that was very nearly vertical, not quite.

Q. Only one?

A. All I saw.

Q. Where did you find that?

A. I cannot tell you now; it was above the 34-foot point.

Q. If it had any dip at all in what direction did it dip?

A. My recollection is that it dipped to the west and ran diagonally; I may be wrong in that but it was near a west dip—northwest I think.

Q. In what direction does the vein which you say appears at the 34-foot point dip?

A. It dips to the west.

Q. You saw no vein above the 34-foot point?

A. No sir.

Q. Nothing but gray porphyry?

A. That was all, with just some discolorations occasionally.

Q. And there is nothing above that point that looks like this specimen here that came from that drift?

A. Nothing.

Q. When did you make an examination to see if there was anything like that there?

A. In December.

Q. You made an examination then to see if there was anything like that sample that has never been in testimony?

A. I have made examinations to see if I could see anything that looked like a vein that was testified to on the other case.

Q. And you could not?

A. I could not.

Q. Did you take any samples for assay in December?

A. No sir.

Q. From that point?

A. No.

600 Q. Not one?

A. Not one.

Q. Now then, if as a fact and assuming as a fact, that at 30 feet below the collar of the shaft, rock has been broken carrying four dollars a ton by assay; at 25 feet rock has been broken carrying $4.60 in gold per ton, and at 21 and 22 feet rock has been broken carrying $7.80 a ton, would you say that there was no vein there?

A. I would call it a lode.

Q. Oh; did you see any lode in that shaft above the 34-foot point?

A. I don't know.

Q. Do you swear there is not one there?

A. No sir.

Q. There may be a lode there and not a vein in your judgment?

A. Yes sir.

Q. You would locate a lode just as quick as you would a vein if you were locating claims, wouldn't you?

A. Certainly.

Q. Now then, if another series of samples, one 22 feet below the collar of the shaft should run $16.20, one 25 feet, should run $19.20, one 30 feet below the collar of the shaft $27.40, that would be pretty good evidence of a lode wouldn't it?

A. It would.

Q. And rather a profitable lode to work if there was much of it?

A. Yes sir.

Q. Do you know where these different pieces of rock came from about which you have testified here—these pieces?

A. I only know that the testimony was that they came out of that shaft.

Q. From Mr. Carr's testimony?

A. Yes sir.

Q. You assume that they came from that shaft?

A. Yes sir.

Q. No. 1 may or may not be out of the crevice, but probably is?

A. Yes sir.

Q. What crevice is it that you think No. 1 may be out of?

601 A. I should judge it was out of the west one, if out of a crevice.

Q. What part of the crevice do you think that is out of?

A. I could not tell you that.

Q. What did you say that material was?
A. That is apparently the ordinary porphyry of the country, which is discolored by iron oxide.
Q. And that is about all it is, isn't it, discolored by iron oxide?
A. That is all, I should judge; I could not say.
Q. You can find rock of that color most anywhere in that shaft can't you?
A. You can find a good deal of it.
Q. No. 2 you said was quite evidently a piece out of the country rock; that is No. 2 isn't it?
A. It is both vein and country rock.
Q. I thought you said that No. 3——
A. No. 2 is both vein and country rock; it is a thin part of the vein.
Q. I thought you said No. 3 was?
A. No. 3 is also very like it.
Q. Which is vein and which is country rock?
A. The dark is the vein and the light-colored gray is the country rock.
Q. Do you tell the jury that this is the line of demarkation of the vein and country rock in that shaft?
A. I do.
Q. Whereabouts?
A. Wherever you find those fissures.
Q. What fissures?
A. The three fissures which are in the shaft.
Q. What is the difference in the structure between the dark-colored material and the other?
A. One is more silicious than the other.
Q. Isn't it a fact that the only difference is that it has been colored by iron?
A. No sir.
Q. And a part of the same rock?
A. No sir, it has more silica in it.
Q. Do you say there is more silica in the dark portion than in the other?
A. Yes sir, if you scratch it with a knife——
602 Q. Do you say that is the west wall, the white portion the west wall of your vein in the shaft?
A. I could not tell that.
Q. Or the east wall?
A. I don't know.
Q. That might have been taken out of the horizontal cracks, might it not?
A. It is possible, but I did not find any of that hard material at the time.
Q. Did you look for it?
A. No, I did not.
Q. Now then, No. 4 I believe you said was a piece of pure feldspar?
A. Yes sir.

Q. What is feldspar?
A. It is silicate of alumina, carrying a large amount of potash and soda with a little magnesia and lime.
Q. It is an eruptive rock, isn't it?
A. Yes sir.
Q. Did you see any feldspar in that shaft yourself?
A. Yes sir.
Q. Lots of it?
A. Yes sir.
Q. In the vein or in the country rock?
A. No, it is the white crystals which you find in the country rock.
Q. Then the feldspar is a part of the country rock?
A. It may be; it is also in veins.
Q. No. 5 is a piece of very silicious hard quartz stuff?
A. Yes.
Q. Is there any difference between No. 5 and No. *and* 3? Aren't they precisely the same in appearance and texture?
A. No, they are not; there is apparently more iron in these brown streaks in No 2 and 3 than there is in this.
Q. A little more disseminated, that is all isn't it, and the piece is smaller too, isn't it?
A. No, that piece would be larger if broken off of there than it is.
Q. Isn't it a fact that that piece you hold in your right hand is practically the dark portion of the pieces that you hold in your left?
A. Practically, yes.
603 Q. You testified the other day that that vein was 7 feet wide, didn't you?
A. No sir.
Q. Didn't you say there was a vein in that shaft 7 feet wide?
A. No, you never heard me say there was a vein there more than two inches wide.
Q. Didn't you say that the hanging wall of that vein was on one side of the shaft to the west, and the foot-wall on the other?
A. No sir; I said what the miners call the hanging wall, and what they call their foot-wall.
Q. What miners call the wall was the wall there on the west end of the shaft, which was the hanging wall?
A. Yes sir.
Q. And the foot-wall on the other end of the shaft, which is the east side?
A. That was what they called it.
Q. Then if those two pieces of rock came anywhere between those two walls, they came from what the miners call a vein, didn't they?
A. Yes sir.
Q. And therefore it must be what miners call a part of their vein stuff?
A. Yes sir.
Q. You call it country rock?

A. I do.
Q. Which is it country rock or vein stuff?
A. It is country rock.
Q. What miners do you allude to when you say miners call that a vein?
A. Mr. Carr on the stand here.
Q. Miners like Mr. Carr.
A. I have heard several of them.
Q. But you would not call it any part of a vein?
A. No sir.
Q. Your part of the vein hugs the other wall very close?
A. Yes sir, the small fissures are the only evidences I saw of veins.
Q. Those small fissures that go up and down?
A. Yes sir.

604 Plaintiff then offered in evidence, without objection, Exhibit P, as follows:

EXHIBIT P.

Certificate of Assay from E. C. Woodward.

24 East Kiowa street. Telephone 315. Colorado Springs, Colo.

I hereby certify that the samples assayed for W. C. Wynkoop gave the following results per ton of 2,000 pounds:

No.	Marked.	Gold.	Value.
		Oz.	Cts.
1		7.38	147.60
2		Trace.	

May 29, 1897.
Charges, —.

E. C. WOODWARD, *Assayer.*

605 FRED BRUCKMAN, being recalled in rebuttal, testified as follows:

Q. Have you made an examination of the Ophir discovery shaft?
A. I have.
Q. Will you describe it to the jury?

Mr. THOMAS: The same objection and exception.

A. It is a shaft about the ordinary size of prospect shafts, 4 by 9 or 7½ feet—seven in the clear, timbered down about 16 feet; the sides appear to be the ordinary porphyry of the country all the way down to a point 34 feet below, and at that point a vein appears in the shaft dipping westward, very clearly and distinctly to my eyes, and showing from that point down to the bottom of the shaft, where a drift comes into the workings from there.
Q. Can you give us an idea of about the dip of the vein?

A. Yes, I estimated it must dip about 15 degrees or something like that I should say.

Q. You may state what examination and what sampling and assaying you made of that shaft above the 34-foot point?

A. I took assays beginning a short distance below the timber; the material looked to me all alike; it was all the porphyry of the country there, cracked horizontally and vertically in short breaks, and I started and got down a few feet below the timbers, something like 20 feet from the collar of the shaft, and then took two assays, one on the northeast and one on the southeast side; I then went down a foot and took two more; I have a memorandum of them here; at a foot lower, which would be 22 feet I again took two; at 23 feet I took two, that is one on the northeast and the other on the southeast side; at 24 feet I took two on each of those sides;
606 at 25 feet I took two, on each of those sides; at 26 feet the same; 27 feet the same; at 28 feet the same; 29 feet the same and at 30 feet; then I took a sample again at the 34-foot point, where the vein enters the shaft on its dip, and I took another about three feet lower down from the same vein, and at 40 feet, and one at the foot of the shaft, and proceeded through the drift, passing northerly and took several at intervals of 10 feet, some three or four.

Q. As to all those taken below the 34-foot point, we care nothing, because we admit there was a vein below that point?

A. All right.

Q. Now, you may state whether those samples which you speak of picking in the southeast and northeast——

A. On the northeast side of the shaft—I call it northeast, because the shaft does not run due north and south.

Q. You may state whether or not the place where you took those samples on the side of end of the shaft was directly over where the vein disappears in the shaft?

A. They were adjacent to that side where the vein disappears, or I should say appears at the 34-foot point in the shaft, coming in from the northeast side.

Q. Did you sample over the points that would be opposite and nearest to that vein?

A. Yes sir.

Q. If the vein continues on up in its dip?

A. Yes sir, that was my object in taking those two sides, to take it as near where the vein came in as possible.

Q. You may give the result of your assays?

A. Above the 34-foot point?

Q. Yes?

A. I got no results whatever, excepting a trace, from the assays I took; I will say from the 30-foot point up, as I didn't take any between 30 and 34 foot.

607 Q. At 34 feet what kind of an assay did you get?

A. At 34 feet I got what would be called pay ore.

Q. As I understand you, you sampled right over the seam up every foot?

A. Within three or four feet of it; not below 30 feet, but over it, from 30 feet up.

Q. You sampled from the 30-foot point up about every foot?

A. About every foot, yes sir.

Q. Fom there on up to near the timbers?

A. Up to near the timbers, 20 feet from the surface.

Q. Is there anything in that shaft above the 34-foot point that resembles a vein?

A. Nothing to my mind whatever; it looks to me to be all the same kind of rock, country rock, porphyry, or *addisite* as it is called.

Q. Is there any distinction between the rock on the northeast side of the shaft, say along about 25, 26, 27 or 28 feet, and the rock clear around the shaft?

A. I should say there was none whatever, none to the eye.

Q. In your opinion at that point, say 25, '6, '7, or '8 feet, is there any vein, lode, ledge or anything of that kind disclosed in that shaft?

A. None whatever at that depth.

Q. Is there anything there that in your opinion would attract the eye of a miner in sinking a shaft as having come to anything that was a discovery of mineral?

A. No sir.

Q. Is there any well-defined crevice there at all until you get down 34 feet?

A. I think not.

Cross-examined by Mr. THOMAS:

Q. Describe to the jury how you took the samples that you assayed above the 34-foot point, and how much space you covered with each?

608 A. At a depth of 20 feet I took one from the northeast side of the shaft.

Q. Did you take it clear across the side?

A. Entirely across? No sir.

Q. How much of the side did the sample that you took cover?

A. I don't know; it would not cover over six inches to a foot probably.

Q. Six inches to a foot square?

A. Possibly that.

Q. That was on the northeast side, and you also took one on the southeast side the same way?

A. Yes sir, I took them all in about the same way; I didn't aim to get any averages because the rock was all alike to my mind and would not make any difference.

Q. So that you took the southeast side and the northeast side and covered about six inches wide in your samples?

A. Yes sir.

Q. Down to 30 feet?

A. No sir.

Q. About 30 feet?

A. No sir, after I got to 24 feet I took two from each of those sides, so that they would cover a space of possibly two square feet.

Q. I thought you said you got down to 30 feet, and then you skipped to 34?

A. No, I said I took a sample from the northeast and another from the southeast face at levels of 20, 21, 22 and 23 foot, and at 24 feet I took two samples from each of the sides.

Q. From 24 feet down to 34 feet you took two samples instead of one?

A. Yes sir.

Q. Each time from the sides of the shaft?

A. Yes sir, each time from the sides of the shaft.

Q. Then you skipped down to 34-feet point and took the next one?

A. Yes sir.

609 Q. Where did you take that from?

A. Directly over what I should call the vein.

Q. The southeast corner?

A. Very near the southeast corner; I call it the east corner.

Q. Who was there with you?

A. No one.

Q. Had you been there before this time?

A. Not previous to this time Mr. Carr took me all through the workings and showed me the works.

Q. Which Mr. Carr?

A. John Carr.

Q. J. W. Carr?

A. J. W. Carr, yes sir.

Q. How long was that before you did the sampling?

A. Possibly a half or three-quarters of an hour. I wanted to go over the ground and he took me down the shafts and showed me what the condition was and what the controversy was, and wanted me to ascertain whether I could find any mineral in the shaft of the Tecumseh and also the Ophir.

Q. Did he show you where the vein went out at the 34-foot point?

A. He called my attention to it; I think I should have seen it, without that very clearly.

Q. And you saw nothing of it above that point?

A. Nothing above 34 feet, no sir.

Q. Would you have seen it if he hadn't shown it to you at that time?

A. Yes sir.

Q. Perfectly plain?

A. Very plain.

Q. And from there down?

A. From there down.

Q. What did you say the dip was?

A. I don't know; I couldn't say where a vein occurs in that way; it is broken up and it is very difficult to determine it; it may

610 have been 15 degrees, and it may have been 25.

Q. And has a variation between those extremes going down the shaft hasn't it?

A. It might have, yes sir.

Redirect examination:

Q. Did you take the rock off with your own hands? Did you break it off yourself?

A. Yes sir, I took all the samples with my own hands.

Q. Alone, as I understand you?

A. Yes sir, there was no one with me at any time when I took the samples from the shaft. Mr. Carr called my attention to what he wanted me to do, and asked me to take samples.

Mr. THOMAS: If we did not make a formal offer of our maps, we want that included.

And thereupon the plaintiff rested his case in rebuttal.

And the above and foregoing was all the testimony given, offered or received upon the trial of said cause.

And thereupon, upon request of counsel, the jury were sent to view the premises in controversy herein, whereupon the court gave the following instruction:

611 JOSEPH H. BEALS } vs. J. J. CONE ET AL. } No. —.

GENTLEMEN OF THE JURY: You are instructed as follows:

In reference to your visit to the premises in controversy, the court instructs you that you are to go to the said premises accompanied by and under the charge of the bailiff appointed by the court for such purpose.

Each party to the suit, under the statute, has the privilege of nominating one person, to be approved by the court, to attend with the jury in your view and investigation of said premises. Such persons so selected and appointed by the court, who in this case are J. W. Carr for the plaintiff, and James F. Smith for the defendant, shall be authorized to act as guides to the jury and to point out to you such features in the premises as it is desirable that you should see, and answer all questions touching the same propounded by you. Such guides, however, must not argue or discuss any questions involved in this case, either with the jury or with each other in the presence of the jury, nor should you engage in any such discussion with them, or either of them, nor should you permit any such discussion by them, nor should you talk with any other person, or allow any other person to talk with you about the case. These guides should be with you only while you are engaged in your view and investigation of the premises, and at no other time or place.

The court further instructs you that the object of your visit to, and examination of, the premises in controversy herein, is to enable you to see for yourselves, and to examine for yourselves, the
612 physical situation, condition and surroundings of the premises; hence, whatever you learn by such view and examina-

tion, is available to enable you to determine the weight of the conflicting testimony of the witnesses respecting the matters upon which they have testified, and to enable you thereby the better to understand and comprehend the testimony of the witnesses respecting the issues involved herein concerning said premises, and your verdict must be based upon the evidence before the court, thus the more intelligently applied by you from your view and examination of said premises. And you must not deliberate among yourselves, or discuss the case in any respect, or in any of its phases, until after you have returned from your view into open court, and sent by the court to your jury-room to consider your verdict.

The court wishes to impress upon the jury the necessity of a strict observance and compliance by the jury, and also by the guides, in regard to the foregoing instructions, and in case of any attempt upon the part of the guides, or either of them to violate their duty, as explained to you in these instructions, the jury, or any member thereof, must at once interpose and put a stop thereto and report to the court any infraction or violation by the guides of their simple duty, as outlined to you in these instructions.

By the court:

IRA HARRIS, *Judge.*

613 And thereupon, the plaintiff requested the court to instruct the jury as follows:

1. No location of a mining claim is valid unless the locator has sunk a discovery shaft deep enough to show a well-defined crevice, and, in addition thereto, has discovered the vein or lode within the limits of the claim; and, if the jury believe from the evidence that the Ophir claim was located in 1892; that during that year the discovery shaft was sunk to a depth of from 25 to 28 feet; that no well-defined crevice was shown therein, or that no vein or lode was discovered therein; that plaintiff perfected a valid location in 1894 by sinking a discovery shaft on the Tecumseh lode to the depth of at least ten feet from the lowest part of the rim of such shaft at the surface; and found a well-defined crevice therein, and discovered a vein or lode of mineral within the limits of the said Tecumseh claim; that he posted at the point of discovery on the surface a plain sign or notice, containing the name of the lode, the name of the locator and the date of discovery and marked the surface boundaries with six substantial posts, either of wood or stone, sunk in the ground, to wit: one at each corner and one at the center of each side line, marked on the side or sides which were in towards the claim; that plaintiff executed and filed the location certificate introduced in evidence; that plaintiff or any one claiming under him has done $100.00 of labor or improvements on said Tecumseh claim for each year since 1894, they will find that plaintiff is entitled to the possession of the ground in conflict by virtue of a compliance with the statutes of the United States and the State of Colorado.

Given in substance,

IRA HARRIS, *Judge.*

614 VI. Where the vein in a controversy is a true fissure vein, it cannot be said to be discovered until the shaft shows the existence of a fissure. A vein or lode authorized to be located, is a crevice or fissure in the earth's crust containing rock in place carrying gold, silver or other valuable mineral deposits named in its statutes, and a crevice is an opening or fissure in the earth's crust; and before such crevice can be considered well defined, the opening or fissure must be so disclosed as that its existence can be established by proof at the time when the discovery is claimed.

In other instructions.

IRA HARRIS, *Judge.*

VII. You are further instructed that this being an action of ejectment, brought in support of an adverse claim, the law of the United States requires that each of the parties shall establish the validity of their respective locations without reference to the invalidity or weakness of the location of the opposing party. If one of the parties should fail to establish the validity of his location, and the other party should succeed in so doing, then and in that case the jury should return a verdict in favor of the party who shows to its satisfaction, under the instructions of the court, that he has made a good and valid location upon the public domain of the United States. If neither party should succeed to the satisfaction of the jury is establishing the validity of its or their location, then and in that case the jury should return a verdict that neither party is entitled to the territory in dispute.

Given in other instgs.

IRA HARRIS, *Judge.*

615 The court instructs the jury that you are the sole judges of the weight and sufficiency of the testimony and of the credibility of the witnesses. And in passing upon this question you may determine, and have the right to determine, from the appearance of the witnesses on the stand, their manner of testifying, their apparent candor and fairness, their apparent intelligence or lack of intelligence, and from all the other circumstances appearing on the trial, which witnesses are the more worthy of credit, and to give credit accordingly. And in passing upon this question, you may also take into consideration the interest, if any, which any witness may have in the result of this trial. And if the jury believe from the evidence that any witness has willfully, knowingly and corruptly sworn falsely to any material fact in this case, then you are at liberty to disregard the entire testimony of such witness, except in so far as the same may be corroborated by other credible testimony, or by the facts and circumstances proved upon the trial.

Given,

IRA HARRIS, *Judge.*

616 The court further instructs you with reference to the acquisition of title to mineral land; the primal fact is the discovery of mineral, and he who first discovers it on a claim is first in

right, and can claim the same, provided he follows up the discovery of mineral by those acts required to be done by the rules and regulations of miners and laws of the State and the United States. Under the law of this State, it is not necessary that the discoverer of mineral should sink his discovery shaft at the point of discovery. It is sufficient under the laws of the State, if he puts up at the point of discovery a discovery stake, indicating that the discovery is made, and that he claims the property. The discovery shaft may be sunk at any point within the exterior boundaries of the claim provided the same is sunk on the vein within the said boundaries. And when this is done, he is entitled to hold said claim under the laws of this State, provided he within the proper time follows it up by the other acts of location, as heretofore set out in these instructions.

Given,

IRA HARRIS, *Judge.*

617 II. If the jury believe from the evidence that the southwest corner of the Tecumseh lode would fall by right on the road-bed of a railroad, and that such point was precipitous ground where the proper placing of such corner was impracticable, and that plaintiff placed such corner stone at the nearest practicable point, suitably marked to designate the proper place, then such corner was sufficient and valid.

In substance,

IRA HARRIS, *Judge.*

III. If the jury believe from the evidence that the Tecumseh claim was first located by sinking a discovery shaft, by posting a discovery notice and by marking the surface boundaries in the manner described in instruction No. 1 (2) and that in order to complete the location by making a valid discovery, the plaintiff sunk the present discovery shaft near the old one, to the required depth, and that there was therein shown a well-defined crevice, and that he marked the surface boundaries in the manner described in instruction No. 1 (2), and discovered a vein or lode of mineral within the discovery shaft of the said Tecumseh claim, and that such well-defined crevice was shown in such Tecumseh lode before it was in the Ophir, and such discovery of a vein or lode was made in the Tecumseh before it was in the Ophir, and that plaintiff has expended more than $100.00 on his claim each year since his relocation, then they will find for him.

Given,

IRA HARRIS, *Judge.*

V. If the jury believe from the evidence that plaintiff's discovery shaft showed a well-defined crevice and the discovery of
618 a vein or lode in 1894, then by the certificate of location introduced in evidence, based on the relocation in 1894, the ground called for therein became occupied and ceased to be unoccupied public domain, and any finding of a well-defined crevice, or

discovery of a vein or lode, by defendants, after that time, would be of no avail to them.

There is no question as to the burden of proof in this case. Each party is simply to prove his own case. Neither party can be said to have established a valid location without clearly showing a well-defined crevice, and the discovery of a vein or lode, and as to these questions, that party who first found a well-defined crevice, and first discovered a vein or lode, has the better right provided he thereafter performed all the necessary and essential acts of location in relation to such claim as set out in these instructions.

Given in part,

IRA HARRIS, *Judge.*

X. If the jury believe from the evidence that plaintiff has disclosed in his discovery shaft a well-defined crevice, containing mineral in appreciable quantities, by which is meant quantities which can be weighed and assayed, and running from $1 to $3 or $4 per ton, and that such mineral is found in occasional spots in such crevices; and that this discovery was made prior to any similar discovery on the Ophir claim, and the plaintiff has complied with the laws of the State and United States, as defined in these instructions, then your verdict will be for the plaintiff.

Refused,

IRA HARRIS, *Judge.*

619 XIII. The jury are instructed that the distinguishing characteristics of a fissure vein are the opening in the earth's crust in which mineral may be deposited, and the deposit of mineral itself. Where one of these features is clearly established, the other may be established by a less conclusive amount of proof. Where one wall of a vein is disclosed, and a body of mineral is found adjoining it, it may be presumed that there is somewhere another boundary or wall. But where no crevice and neither boundary of a crevice has been disclosed, the mere finding of country rock that in one instance furnishes an assay, cannot be received as sufficient proof of the existence and discovery of a fissure vein.

Given in substance,

IRA HARRIS, *Judge.*

XI. If the jury believe from the evidence that a vein is disclosed in the discovery shaft of the Tecumseh lode, but that such vein on its strike passes out of the west side line of the claim, then plaintiff cannot follow or claim that particular vein beyond where it crosses such side line, but the jury are instructed that this fact would not impair plaintiff's right to the surface of his location or to any other vein within his surface boundaries, the top or apex of which is within such surface boundaries.

Refused,

IRA HARRIS, *Judge.*

XII. The jury are instructed that the law presumes that the strike of a vein upon which a location is made, is such as will make it a valid location on such vein throughout the entire length of the claim, and the burden of proof is cast upon any one who claims to the contrary, and unless defendants have affirmatively
620 proven, to the satisfaction of the jury, that the vein upon which the Tecumseh is located, if there be such vein, passes out of the side line of the claim, it will be assumed that it does not.

Refused,

IRA HARRIS, *Judge.*

To such of the foregoing instructions, requested by plaintiff, as were refused or modified by the court, the plaintiff, by his counsel, then and there duly excepted.

After the jury had returned into open court, from its view and investigation of the premises in controversy herein, General Johnson, counsel for plaintiff, said:

I am advised that Mr. Smith, guide for the defendants, before the jury reached the property, had made a measurement and survey as to the southwest corner of the claim where it would by right be and had driven a stake there to indicate the point, and it varies from our understanding of where the corner ought to be; it varies from our certificates of location, so that it seems to me that that is not evidence—that he had no right to do that.

The COURT: I don't think that was evidence at all.

Gen. JOHNSON: I think that ought to be excluded from the consideration of the jury.

Mr. THOMAS: I will say, for the information of both court and counsel, that while I know nothing about the act of Mr. Smith upon the ground, I fully expected that he would be here upon Monday morning. My instructions to him when he left town were to go up there and run these lines and come back on Monday morning. Upon telephoning on Monday night, we found
621 that he was not here, because he understood that there would be no trial on Monday, on account of the fact that that day was motion day, but expected to be here on Tuesday morning, when it was too late for us to introduce any testimony. If he made a survey or set a post, it was doubtless under the instructions that were given to him for the purpose of using him as a witness. Of course he was not used as a witness on account of this misunderstanding, but I fully agree that if any post was set there by him upon any measurement which was not testified to before the jury and which was the subject of cross-examination, it may go out.

The COURT: Yes, I think that is true; he had no authority to do that.

Mr. THOMAS: My object in making this explanation is to disabuse the mind of the court and counsel of the idea that after he was appointed as a guide he went there for the purpose; I think he must have done this on Saturday or Sunday.

Gen. JOHNSON: We don't question that.

The COURT: I will simply say to the jury in that connection, that

any information which may have been received through the medium of Mr. Smith in relation to the point where corner stake No. 4, that was the witness stake of the Tecumseh, was placed, other than that which you have received during the presentation of evidence in this court-room, and upon the trial, will be disregarded entirely by you.

Mr. THOMAS: Unless the lines were run at the request of the jury, but I don't suppose that was done.

Thereupon the court instructed the jury as follows:

622 JOSEPH H. BEALS
vs.
JAMES J. CONE ET AL. } No. 4086.

GENTLEMEN OF THE JURY: The court instructs you as follows:

1. This is an action brought by the plaintiff against the defendants in support of an adverse suit filed in the land office at Pueblo, and is brought to determine the right and title to the possession and occupancy of a certain piece of ground claimed by the plaintiff to be a part of and included within the surface boundaries of the "Tecumseh" lode, and which the defendants claim to be a part of and included within the surface boundaries of the "Ophir" lode, situate in the Cripple Creek mining district, El Paso county, Colorado.

The answer of the defendants puts in issue the allegations of the complaint; so that with respect to such controverted allegations of the complaint, with reference to the location of the Tecumseh lode, the burden of proof is upon the plaintiff to establish such allegations of the complaint by a fair preponderance of the evidence, and thus to show a valid location of the said Tecumseh lode, as a valid location is defined herein in these instructions, before the plaintiff is entitled to a verdict at your hands; and with respect to the claim of the defendants concerning their alleged location of the Ophir lode set up in the answer of the defendants, the court instructs you that the like burden of proof is upon the said defendants to establish the allegations of said answer, concerning the location of the said Ophir lode by a fair preponderance of the testimony, and thus show a valid location of the said Ophir lode, before the defendants are entitled to a verdict at your hands.

623 2. Citizens of the United States, or those who have declared their intention to become such, may locate lode mining claims upon the public mineral domain of the United States, by compliance with the terms of the national and State statutes in that behalf, as hereinafter set forth;

The national and State statutes as aforesaid, authorize and prescribe that a citizen of the United States, or one who has, according to law, declared his intention to become such citizen, and is of twenty-one years of age, may locate and appropriate of and upon the public mineral lands of the United States, not already located and held under a valid and subsisting location, according to law, by any other person or persons, a lode mining claim of not greater

dimensions, in El Paso county, Colorado, than 1,500 feet in length and 300 feet in width, by doing the following:

(1) By the discovery of a vein or lode of mineral-bearing rock in place, within the limits of said proposed location.

(2) By sinking a discovery shaft upon the lode or vein to the depth of at least ten feet from the lowest part of the rim of such shaft at the surface, or deeper, if necessary, in order to disclose a well-defined crevice, containing mineral-bearing rock in place, or by running an open cut, cross-cut or tunnel, cutting said lode or vein at a depth of ten feet below the surface, or by running an adit of at least ten feet in or along the lode or vein, from the point of discovery.

(3) By posting at the point of discovery on the surface a plain sign or notice, containing the name of the lode, the name of the locator and the date of discovery.

624 (4) By marking the surface boundaries of the claim by six substantial posts, hewed or marked on the side or sides in toward the claim, and sunk in the ground, one at each corner and one at the center of each side line.

(5) By filing in the office of the recorder of the county in which such claim may be situated, a location certificate, containing the name of the lode, the name of the locator, the number of feet in length claimed on each side of the center of the discovery shaft, the general course of the lode, as near as may be, together with reference to some natural object or permanent monument, as will identify the claim with reasonable certainty.

But the order of the performance of these several location acts, and the time within which they must be severally performed, are immaterial, provided no valid adverse rights under a conflicting location intervene meanwhile; and in order to keep this location good as against any such intervening rights, the locator must have made a discovery of mineral, as above set forth, within the boundaries of the proposed claim, and within sixty days next thereafter must have sunk his discovery shaft, or run his tunnel, cross-cut, open cut or adit, as above set forth, and within three months thereafter such discovery must have staked his boundaries and filed his location certificate, as above set forth.

625 3. What is meant by a vein or lode under the statute is a body of mineral or mineral-bearing rock, with defined boundaries, in the general mass of the mountain. This vein, lode, or body of mineralized rock must contain an appreciable quantity of some of the precious metals, such as gold and silver. While the vein must be found in rock in place, that is, separated by well-defined boundaries from the general mass of the mountain, it is not necessary that it should have these characteristics at the surface, or that it should be, theoretically, perfect in all respects as to all these characteristics. If the vein in continuing down passes or is included within walls of rock in place, it is a sufficient discovery, if it is sufficient in other particulars, that is, containing mineralized rock, bearing appreciable quantities of the precious metal. Theoretically, a vein must have two walls which clearly separate it from the general

mass of the mountain, but, for the purposes of this case, you are instructed that if there is a body of mineralized rock, containing appreciable quantities of some of the metals, and if it is found in place, it is not necessary that it should have two well-defined walls; it is, for practical purposes, a vein, if the mineralized body of rock, or the body of mineral, is found in the general mass of the mountain, and if it continues unbroken and without interruption, it is regarded as a vein whatever the boundaries may be; and if it contains such a showing of mineral in connection therewith as that a competent miner would be willing to follow it in prospecting, in the expectation of reaching thereby richer or larger quantities of ore beyond. Such a vein may be very thin or wide, or it may be rich or nearly barren. It is neither the width of the crevice, nor
626 the richness of its contents that alone determine whether that which is discovered is a vein or lode within the meaning of the statutes. A mineral vein or lode, whether small or large, rich or poor, at the point of discovery, if discovered and located in compliance with the acts of Congress and the statutes of the State, creates the title and the right of possession, as set forth in these instructions.

4. The vein or lode which the law requires to be discovered, need not contain, as disclosed in the discovery shaft, ore or mineral, in the sense that it will pay for extraction or shipment, but the vein or lode must appear as a distinctive formation in the country rock, and appear therein in the nature of mineral or mineral-bearing rock, different in character and nature from the country rock enclosing it. And in this connection, in this definition, the elements are the body of mineral, or mineral-bearing rock and the boundaries. With either of these things well established, very slight evidence may be accepted as to the existence of the other. A body of mineral or mineral-bearing rock in the general mass of the mountain, so far as it may continue unbroken, and without interruption, may be regarded as a lode or vein, whatever the boundaries may be. On the other hand, with well-defined boundaries, very slight evidence of such mineral would be sufficient to establish the existence of a lode. Such boundaries constitute a fissure, and if in such fissure mineral is found, although in small quantities, it may be called a lode, or vein.

5. In this connection the court instructs you that it is not necessary to the existence of a thing as a vein, that the mineral-
627 bearing rock, or the rock which carries the mineral, should be quartz; it may be any other kind of rock carrying mineral, even though the rock itself was originally of the same character, or composition, as the surrounding walls, and though it may be subsequently changed or decomposed, by natural agencies from its original character, provided that one may detect in the ground and mark the boundaries between such mineral-bearing rock and its enclosing walls, or by assays establish the difference between the walls and mineral-bearing rock.

6. The court instructs you that the statute requires that the vein or lode must be in place. This term indicates the body of the coun-

try, which has not been affected by the action of the elements, and which remains in its original state and condition, as distinguished from the superficial mass which may lie above it. A continuous body of mineral, or mineral-bearing rock, extending through loose, disjointed rocks, is a lode as fully as that which is found in the more regular formations; and if the lode is in the general mass of the mountain, as distinguished from slide, debris or toumble stuff on the surface, it is in place within the meaning of the act of Congress. If the principal part of the rock about the mineral is in its original position, according to the present structure of the mountain, the lode is in place although some masses of rock or boulders may be associated with the ore.

628 7. Unless such a vein or lode as has been herein defined has been discovered by the plaintiff, then his location as to the said Tecumseh lode is invalid, and your verdict should be against plaintiff. And unless such a vein, or lode, as herein defined has been discovered by the defendants, or their grantor, then their location as to the said Ophir lode is invalid, and your verdict should be against defendants.

8. If the jury believe from the evidence in this case, that the defendants, or their grantors, are now, and that on or about the 3rd day of February, 1892, were citizens of the United States, and that on or about the said 3rd day of February, 1892, or at any time before there accrued the rights, if any, which the plaintiff has acquired to the ground in controversy under the Tecumseh lode, or if no such rights were acquired, then at the time before the bringing of this action, made a valid location of the said Ophir lode, as a valid location has been defined to you herein, then the jury should find the issues joined herein for the defendants.

9. If the jury should believe from the evidence in this case that the said defendants did not make a valid location of the said Ophir lode, then the court instructs you, as a matter of law, that the territory within the exterior boundaries of the said claim was, for the purposes of this case, unappropriated public mineral domain of the United States, and subject to location as provided by law.

10. And if the jury should believe from the evidence in this case that the said plaintiff was a citizen of the United States, and
629 was a citizen of the United States at the time of his alleged location of the said Tecumseh lode, and that a valid location of the said Ophir lode was not theretofore made by the said defendants, and if you further believe from the evidence that the said plaintiff made a valid location of the said Tecumseh lode, on or about the 20th day of April, 1894, then the jury should find the issues herein for the plaintiff.

11. If the jury believe from the evidence that plaintiff's discovery shaft showed a well-defined crevice and the discovery of a vein or lode in 1894, then, by the certificate of location, introduced in evidence, based on the relocation in 1894, the ground called for therein became occupied, and ceased to be unoccupied public domain, and any finding of a well-defined crevice, or discovery of a vein, or lode, by defendants, after that time, would be of no avail to them.

12. If the jury believe from the evidence that the Tecumseh claim was first located by sinking a discovery shaft, by posting a discovery notice and by marking the surface boundaries in the manner described in instruction No. 2, and that in order to complete the present discovery shaft near the old one to the required depth, and that there was therein shown a well-defined crevice, and that he marked the surface boundaries in the manner described in instruction No. 2, and discovered a vein or lode of mineral within the discovery shaft of said Tecumseh claim, and that such well-defined crevice was shown in such Tecumseh lode before it was in the Ophir, and such discovery of a vein or lode was made in the Tecumseh before it was in the Ophir, and that plaintiff has expended more than $100.00 on his claim each year since his relocation, then they will find for him.

630 13. You are further instructed that under the Federal statutes concerning mineral lands, all citizens of the United States, and those who have declared their intention to become such are entitled to prospect, discover and locate veins, lodes or ledges upon the public mineral domain. And, if you believe from the evidence that J. E. Smith and John Hubbard, or either of them, were citizens of the United States at and during the time of the location of the said claim, then you are instructed that so far as the question of citizenship may be important, the said Ophir claim was located by those to whom the Government of the United States has extended such right.

14. You are further instructed that the testimony of the defendant Cone, given before the land office at Pueblo, Colorado, on the 11th day of October, 1893, at the hearing of the protest against the patenting of said Ophir claim, must be considered by you in connection with, and as any other evidence in the case; that is, you are the judges of its weight and sufficiency, and its bearing upon the issues herein.

15. The court further instructs you with reference to the acquisition of title to mineral land; the primal fact is the discovery of mineral, and he who first discovers it on a claim is first in right, and can claim the same, provided he follows up the discovery of mineral by those acts required to be done by the rules and regulations of miners and laws of the State and the United States. Under the laws of this State, it is not necessary that the discoverer of mineral should sink his discovery shaft at the point of discovery. It is sufficient under the laws of the State if he puts up at the

631 point of discovery a discovery stake, indicating that the discovery is made, and that he claims the property. The discovery shaft may be sunk at any point within the exterior boundaries of the claim, provided the same is sunk on the vein within the said boundaries. And when this is done he is entitled to hold said claim under the laws of this State, provided he within the proper time follows it up by the other acts of location, as heretofore set out in these instructions.

16. The term "well-defined crevice," as used in the statute, is intended to mean a vein, or lode or ledge of mineral-bearing rock be-

tween walls. In its practical application, however, it must be considered in connection with the character of the mineral deposit which is the subject of location If the lode is very wide, or is horizontal, or exists with boundaries ascertainable by assay or analysis, then a discovery shaft sunk into or upon or through the same at a distance of ten feet or more below the surface, is in effect the exposure of such a well-defined crevice as the law requires, for, were it otherwise, many metal-iferous lodes or deposits could not be located or appropriated at all.

17. The court instructs you that one of the essential acts of location is marking the surface boundaries of a lode claim, and, in the language of the statute that "such surface boundaries shall be marked by six substantial posts, hewed or marked on the side or sides which are in towards the claim, and sunk in the ground, to wit, one at each corner and one at the center of each side line." And further, *inter alia*, that "where in marking the surface boundaries of a claim, any one or more of such posts shall fall by right upon precipitous ground where the proper placing of it is impracticable or dangerous to life or limb, it shall be legal and
632 valid to place any such post at the nearest practicable point suitably marked to designate the proper place."

18. Upon that point the court instructs you that unless you find from the evidence that the southwest corner of the Tecumseh claim fell upon precipitous ground, and within the lines of the rails of the Florence & Cripple Creek railroad, or so near to one or the other of them that the erection thereof would be interfered with by the passage of trains, and was for that reason impracticable, then you are instructed that it was the duty of the plaintiff to set his post at such corner. If, on the other hand, you should believe from the evidence, that the proper placing of such stake, was within the lines of the rails of said road, then you are instructed that under the statute such witness corner shall be set at the nearest practicable point. Whether this was done, you are to determine from the evidence in the case, and unless you should believe in that event that the said witness corner was set substantially at the nearest practicable point, the marking of said claim would be invalid.

19. In this connection the court instructs you that if you believe from the evidence that the southwest corner of the Tecumseh lode, fell by right on the road-bed of the Florence & Cripple Creek railroad, and that such point was precipitous ground, where the proper placing of such corner was impracticable, and that plaintiff placed such corner stone at the nearest practicable point, suitably marked to designate the proper place, then such corner was sufficient and valid.

20. You are further instructed that the plaintiff cannot recover in this action upon any location or possession of the ground
633 in controversy prior to the 20th day of April, 1894. His first location certificate has been excluded from your consideration, and the only record or evidence of title for your consideration alleges a discovery as of said date. It is upon that location and the alleged discovery, that the plaintiff must recover, if at all.

21. You are further instructed that while the statutes do not require that the discoverer of mineral or of a vein should sink his discovery shaft at the point of discovery, but may sink the same at any point within the exterior boundaries of the claim he may desire, nevertheless you are instructed that it must be sunk upon a vein within said boundaries, and that the right and extent of the lode mining location must be measured by and from such discovery shaft and its position within the lines of said location.

22. The plaintiff in his complaint claims title to the Tecumseh Lode mining claim by virtue of an alleged discovery of a vein therein about the first of January, 1893. The defendants in their answer claim title to the Ophir location upon the alleged discovery of a vein or lode therein on or about the 3rd day of February 1892. It is admitted by the plaintiff that prior to the 20th day of April, 1894, no lode, vein or ledge was discovered within or upon said Tecumseh Lode mining claim, as contemplated by the statutes; and it is admitted by the defendants that on the 3rd day of February, 1892, no discovery of any vein had then been made in the Ophir discovery shaft. You are therefore to determine from the evidence which of said shafts has disclosed such a vein, lode or ledge, if any was disclosed, within their respective discovery shafts.

634 23. The jury are instructed that if they believe from the evidence that the defendants have not performed labor, or placed improvements on the Ophir claim of the reasonable value of $100.00 irrespective of what they may have paid for such work, or improvements, since the first day of January, 1897, their verdict must be against the defendants, even though they may find that plaintiff is not entitled to the ground in conflict.

24. Upon this point the court further instructs you that the law does not presume a forfeiture by the failure to perform manual labor, and the plaintiff, claiming that the Ophir lode became forfeited for such reason, the burden of proving that the annual labor was not done thereon, is on the plaintiff; and unless he has shown you by a fair preponderance of the evidence that the work was not done, you are to determine that question in favor of the defendants.

25. If you should believe from the evidence that within the Tecumseh shaft is disclosed a vein, lode or ledge, such as is required by the law, as hereinabove given, but that the strike or course of such vein is substantially north and south, so that the same passes through the side lines of said claim, and does not pass through the end lines thereof, then you are instructed that the location is void as to all parts and portions thereof lying more than 150 feet on either side of the center of the strike of said vein at the surface, and the plaintiff can under no circumstances recover beyond such line or lines. You are therefore instructed if you so believe from the evidence, that your verdict can only be for such parts or portions of said lode mining claim as lie within 150 feet on each side of the center of said vein at the surface.

635 26. The jury are further instructed that this being an action of ejectment, brought in support of an adverse claim, the law of the United States requires that each of the parties shall establish the validity of their respective locations without reference to the invalidity or weakness of the opposing party. If one of the parties should fail to establish the validity of his location, and the other party should succeed in so doing, then and in that case the jury should return a verdict in favor of the party who shows to its satisfaction, under the instructions of the court, that he has made a good and valid location upon the public domain of the United States. If neither party should succeed to the satisfaction of the jury in establishing the validity of his or their location, then and in that case the jury should return a verdict that neither party is entitled to the territory in dispute.

27. The jury are the sole judges of the weight and sufficiency of the testimony and the credibility of the witnesses; and in passing upon this question the jury may determine, and have the right to determine, from the appearance of the witnesses on the stand, their apparent candor and fairness, their apparent intelligence or lack of intelligence, and from all the other circumstances appearing on the trial, which witnesses are the more worthy of credit and to give credit accordingly. You may also take into consideration

636 the interest, if any, which any witnesses may have in the result of this trial; and if the jury should believe from the evidence that any witness has willfully and corruptly sworn falsely to any material fact in this case, then you are at liberty to disregard the entire testimony of such witness, except in so far as the same may be corroborated by other credible testimony or by the facts and circumstances proven upon the trial.

28. No one of these instructions should be read and considered by itself; such instructions should be read and considered in connection with all the others, and as related to all of the instructions.

29. If the jury should find from the evidence that the plaintiff's claim was located upon a vein, lode or ledge, which in its course departs from or passes through the side lines of said claim, and that said location is superior to that of the defendants, then and in that event your verdict should be substantially as follows, after the caption:

"We, the jury, find for the plaintiff, and that he is the owner of and entitled to the possession of all that part of the Tecumseh Lode mining claim described as follows:"

(Here give description of that part of said claim lying 150 feet on each side of the point, or places, where you may find from the evidence the course or strike of such vein crosses said side lines.)

637 And that he is entitled to such part of said Tecumseh Lode mining claim, by virtue of a full compliance by the plaintiff with the laws of the United States and the State of Colorado, concerning mineral lands.

If such description of such part of said Tecumseh claim does not include the discovery shaft of the Ophir, and that the defendants have discovered a vein, lode or ledge therein, and otherwise com-

plied with the law in the location thereof, as outlined in these instructions, you may further find as a part of said verdict—

"And we, the jury, further find that the defendants are the owners of and entitled to the possession of all that part of the said Ophir Lode mining claim not in conflict with the above-described territory or premises awarded plaintiff, by virtue of a full compliance with the laws of the United States and the State of Colorado, concerning mineral lands."

Counsel for defendants, gentlemen, request that you be further charged in relation to the evidence upon which you are to decide the issues in this case. Upon that point the court instructs you that the issues that have been submitted to you on this trial are to be determined wholly by the evidence adduced on this trial, and you are to consider in no wise any remarks of counsel in relation to the former trial of this case, or its result, nor to consider any evidence except such as has been presented herein, in arriving at your verdict.

29. In a case of this sort your verdict may be one of three
638 kinds. It may be, if the evidence so warrant it, for the plaintiff, or it may be for the defendants, or it may be to the effect that neither the plaintiff nor the defendants have made a valid location of the said lodes in controversy in this action.

If you find for the plaintiff, the form of your verdict will be, with the same caption as in these instructions:

"We, the jury, find the issues joined herein for the plaintiff, and we further find that he has established his right and title to and is entitled to the possession and occupancy of the ground in controversy herein, by reason of a full compliance with the acts of Congress and the laws of the State of Colorado relating thereto."

If you find for the defendants, the form of your verdict will be, with the same caption:

"We, the jury, find the issues joined herein for the defendants, and we further find that they have established their title and right to, and are entitled to the possession and occupancy of the premises in controversy by reason of a full compliance with the acts of Congress and the laws of the State of Colorado relating thereto."

If you should find against both the plaintiff and defendants the form of your verdict will be, with the same caption:

"We, the jury, find that neither the plaintiff nor the defendants have established their right to the title to, and the possession and occupancy of the ground in controversy, by reason of the fact
639 that neither the plaintiff nor the defendants have complied with the acts of Congress and the laws of the State of Colorado relating thereto."

In either case your verdict should be signed by one of your number as foreman.

By the court:

IRA HARRIS, *Judge.*

To the giving of which instructions, and to each and every thereof, the plaintiff, by his counsel, then and there duly excepted.

And thereafter and on the 18th day of February, A. D. 1898, the jury returned its verdict in said cause, in words and figures as follows, to wit:

640 "JOSEPH H. BEALS
vs.
JAMES J. CONE ET AL. } No. 4086.

We, the jury, find the issues joined herein for the defendants; and we further find that they have established their title and right to, and are entitled to the possession and occupancy of the premises in controversy, by reason of a full compliance with the acts of Congress and the laws of the State of Colorado relating thereto.

D. L. CELL, *Foreman.*"

To which verdict the plaintiff, by his counsel then and there duly excepted, and gave notice of a motion for a new trial, and to set aside said verdict.

And thereafter and on the 21st day of February, the plaintiff filed his motion for a new trial herein, for the following reasons, to wit:

First. Irregularity in the conduct and proceedings of the jury which sat in said cause by which plaintiff was prevented from having a fair trial, as shown by affidavits filed in support hereof.

Second. Irregularity in the conduct and proceedings of the defendants in said cause, by which plaintiff was prevented from having a fair trial, as shown by affidavits filed in support hereof.

Third. Irregularity and illegality in the proceedings and conduct of the sheriff of said county in summoning said jury, and
641 in his control thereof, by which plaintiff was prevented from having a fair trial, as shown by affidavits filed in support hereof.

Fourth. Irregularity and illegality in the conduct of one of the bailiffs of this court while in charge of said jury by which plaintiff was prevented from having a fair trial, as shown by affidavits filed in support hereof.

Fifth. Misconduct of the jury, by which plaintiff was prevented from having a fair trial, as shown by affidavits filed in support hereof.

Sixth. Accidents and surprise which ordinary prudence could not have guarded against, by which plaintiff was prevented from having a fair trial, as shown by affidavits filed in support hereof.

Seventh. Newly discovered evidence, material evidence of the plaintiff which he could not with reasonable diligence have discovered and produced at the trial, which prevented plaintiff from having a fair trial, as shown by affidavits filed in support hereof.

Eighth. Because said verdict appears to have been given under the influence of passion, prejudice, or from some undue influence, which prevented plaintiff from having a fair trial, as shown by affidavits filed in support hereof.

Ninth. That said verdict is not supported by the evidence.

Tenth. That said verdict is against the law as given to the jury in instructions of the court.

Eleventh. Error of the law occurring at the trial and excepted to by plaintiff.

Twelfth. That the court erred in giving each and every one of the instructions to the jury, which were not given upon request of plaintiff.

642 Thirteenth. That the court erred in refusing instructions asked by plaintiff.

Fourteenth. That the court erred in admitting evidence objected and except- to by plaintiff.

Fifteenth. That the court erred in excluding evidence offered by the plaintiff which was duly excepted to.

Wherefore, plaintiff prays that the said verdict may be vacated and a new trial granted herein.

Thereupon, plaintiff offered in support of said motion, the following proof:

Mr. THOMAS: I desire, as a preliminary in this matter to object to the introduction of any testimony or affidavits, under the allegations of this motion for a new trial; this motion consists simply of a copy of the statute, almost in terms, with nothing else.

Gen. JOHNSON: I desire to object to the hearing of such motion, because we have had no notice of it.

The COURT: Let us hear what the motion is.

Mr. THOMAS: I may state however, at this time, that so far as the main proposition is concerned, it may not well be passed upon until such time as your honor may desire to take it up in connection with the testimony received; my impression is that unless we offer it now, it may be considered as waived.

The causes for a new trial, as I have stated, are simply a recital of the language of the statute, without giving any specific grounds for the motion, and our objection to the hearing of testimony

643 or to considering any affidavits in connection with this motion is that it makes no specific charge; it gives no designated ground for the motion, which informs either the court or counsel as to the character of the charge that is to be submitted to the consideration of the court as error in the trial, or misconduct during the trial, and that the use merely of the language of the statute, where misconduct of the jury, or the bailiffs or parties is charged is not sufficient to support a motion for a new trial, but the particular thing done, the particular act which constitutes such misconduct must be set forth with sufficient certainty to apprise both the court and the opposing party of the nature and character of the action they rely upon.

Gen. JOHNSON: This is more of a demurrer to the motion.

Mr. THOMAS: My only object is now to present the motion in such shape that we can avail ourselves of it, and not have it considered waived; I am perfectly willing to postpone it until the evidence is offered, it is immaterial to me, except in so far as I don't

want it to be considered as having been waived; I am quite willing to raise it by way of objection when evidence is offered.

The COURT: I shall allow the objection to be made and argued when you offer your testimony; you can go into it now or wait, as you prefer.

Mr. THOMAS: Very well.

Plaintiff then moved the court to strike from the files three affidavits of F. A. Mangold, J. J. Cone and M. F. Bowers, filed on the 28th of this month; the time for filing affidavits on the part of the defendants expired on the 18th; these were filed ten days later without any notice to us whatever. The court ordered that
644 we should file our affidavits by a certain time and give the other side copies, which we did, and that they should have ten days thereafter to file their affidavits, and to furnish us copies; but they did neither; they filed these affidavits and we have never heard of them until this morning, and we ask to have them stricken from the files; it will do no harm for the very parties who made the affidavits are here, and we shall put at least two of them on the stand ourselves, but so far as the affidavits are concerned——

Mr. LEE: I got ten days' continuance to file the affidavits, owing to the fact that the bailiff, Welch, at that time was very ill, and of that sickness he subsequently died; it was impossible for us to talk with him, and to prepare the affidavit, and also the fact that Mr. Cone was absent from the State.

General JOHNSON: I move that those affidavits be stricken from the files, for the reason that there is no grounds for their having been filed in this case.

The COURT: I will pass upon those affidavits as they come before me.

To which ruling of the court the plaintiff, by his counsel, then and there duly excepted.

F. A. MANGOLD, being first duly sworn on behalf of the plaintiff, testified as follows:

Mr. THOMAS: I desire, by way of preliminary, to record an objection to the reception of any oral testimony upon an application for a new trial, upon the ground that the statute provides for a different class of testimony; and I also desire to record the objection that the witness sworn was a juror in the case, and that the testimony of a juror cannot be received to impeach the verdict; the statute
645 makes provision for an affidavit of a juror in one particular case, and it is only by affidavit that a juror can speak of his verdict as to the particular thing to which the statute refers, and that is that the verdict was reached by chance.

The COURT: That is the way I understand the law; do you swear this juror to show misconduct of the bailiff?

Gen. JOHNSON: Yes sir, and third parties.

The COURT: I will make my ruling now and you can save your exceptions. I shall not allow any evidence to go in from any mem-

ber of the jury to show any misconduct in any form, shape or manner, except such as comes within the purview of this section.

Gen. JOHNSON: Any misconduct of the jurors themselves?

The COURT: Any misconduct of the jurors themselves.

To which ruling of the court, the plaintiff, by his counsel, then and there duly excepted.

Q. Where do you reside, Mr. Mangold?

A. 26 East Columbia street, this city.

Q. Were you a member of the jury that recently tried this case?

A. Yes sir.

Q. You were at one time a deputy sheriff of this county, were you not?

A. Yes sir.

Q. During what period of time?

A. I think I went into the sheriff's office in January 1892 as undersheriff, and served one term and part of another.

Q. Who was the sheriff at that time?

A. M. F. Bowers.

Q. Where were you when you were summoned as a juror?

A. I was in the sheriff's office downstairs.

Q. Were you a deputy sheriff at that time?

A. I have a commission as a special deputy, yes.

646 Q. You were at that time?

A. Yes sir.

Q. How long had you held that commission?

Defendant objects; which objection was by the court sustained; to which ruling of the court the plaintiff, by his counsel, then and there duly excepted.

Q. During the time that you were a deputy sheriff, you attended the court here a good deal, did you not?

Defendants object, being immaterial and incompetent; which objection was by the court sustained; to which ruling of the court the plaintiff, by his counsel, then and there duly excepted.

Plaintiff offers to show by the witness that during the years he was a deputy sheriff he was in attendance upon the court more or less; that he frequently saw Mr. C. S. Thomas attending this court and knew him at least by sight; that notwithstanding this fact he testified on his *voir dire* examination to the effect that he knew none of the attorneys even by sight, except Mr. Early.

Which offer of proof was by the court excluded; to which ruling of the court, plaintiff then and there duly excepted.

Q. What was your business at the sheriff's office that morning?

A. I went in there to return an inventory that I had given into the sheriff's office, and stopped to talk to Mr. Cree, when Mr. Cook came around and said they wanted some jurors upstairs, and subpœnaed me to serve on the jury.

Q. You were talking with Mr. Cree?

A. Yes sir, I just turned these papers over to Mr. Cook, and turned

around and stopped to talk to Mr. Cree, and I believe he summoned both of us right there; that is my recollection now.

Q. Was Mr. Cree a deputy sheriff also?

A. I don't know about that.

647 Defendants object; which objection was by the court sustained; to which ruling of the court, plaintiff then and there duly excepted.

Q. Is he a deputy sheriff at the present time?

A. I don't know.

Defendants object; which objection was by the court sustained; to which ruling of the court plaintiff then and there duly excepted.

Q. Had you received any intimation before that that you would be wanted on the jury?

A. No sir, not that I recall; I don't remember anything being said until Mr. Cook subpœnaed me.

Q. You say you have no recollection of any one suggesting to you that you might be needed on the jury prior to that?

A. I don't have any recollection; there may have been something said that there was to be a vacancy in the jury or something; I have been making an invoice for some time, and there might have been something said, but not that I recall now.

Q. Don't you think there was something said a few days before that?

A. Not that I recall, sir.

Q. Who served you?

A. Mr. Cook, the undersheriff.

Q. Who made out the list for the jury?

A. I don't know.

Defendants object; the return shows who served it; which objection was by the court sustained; to which ruling of the court plaintiff then and there duly excepted.

Mr. THOMAS: I think this is a good place to insist upon my objection. There is no specific charge of misconduct in the selection of this jury, in serving the venire or in the return thereof anywhere within the four corners of this motion; the only thing which is any approach to it is illegality and irregularity

648 in the proceedings and conduct of the sheriff of this county in summoning said jury and in his control thereof, by which plaintiff was prevented from having a fair trial, as shown by affidavits filed in support hereof. I don't recall any affidavits that were filed then, or that have since been filed that throws any light upon the irregularity or illegality of the summoning of this jury; there are some certified copies of proceedings from the clerk's office with reference to the regular panel; I cannot for my own part understand the exact bearing which those certified copies have upon the general charge of misconduct, but my proposition is that no testimony or affidavits can be received, and no ground of motion for a

new trial can be entertained that is so general and all-embracing in its character as the one upon which this application is founded, and that unless and until the party asking for a new trial shall place his finger upon some specific act of wrong-doing, which the court can understand, and which the other side can meet, the court will not consider it under any circumstances; I therefore object to the introduction of such testimony under the allegations in this motion for a new trial.

The COURT: I think, without arguing this matter any further, under the manner in which this comes before the court, and the gravity of the charges made in this motion, I will allow you to go ahead.

Defendants except.

Q. Mr. Mangold, did you go with the jury to view the property?

A. I did, yes sir.

Q. You may state whether or not the bailiffs in charge of the jury on that occasion, and particularly on the trip returning
649 from there to Colorado Springs, permitted you to go to another part of the car from the other jurors and play cards with third parties?

Mr. THOMAS: I desire to make the objection that that is certainly a question that goes to the conduct of the juror, or to the jurymen, and I want to make another objection, there is nothing in the motion or affidavits which justifies the asking or answering of such question.

Objection overruled; defendants excepting.

A. When we got on the car at Elkton, the bailiffs could not find seats to sit us all together. Mr. Moody, a member of the jury and I sat on one seat with Mr. Parker, the chairman of the board of county commissioners, and he sat in another seat with Mr. J. C. Plumb. The bailiffs were both in the car and the jury was in that car, and after the train had started Mr. Parker suggested a game of high five, and we started to play and immediately the bailiff came and said we must not play cards with outsiders, and then went and asked a number of gentlemen in the car to change seats until they got the jury all put together.

Q. How long did you play cards?

A. I think we played a part of one hand, that is my impression; we might have played one hand out, we certainly had not got started at it when the bailiff came and stopped it and asked various gentlemen to vacate their seats and got us all together.

Q. Didn't you play cards there some time?

A. No sir, it was a short time; we played afterwards; the rest of the jurors that were put into the seat where I was, we played afterwards, yes, the members of the jury.

Q. Weren't the balance of the jury all together over in one part of the car?

A. No sir, they were scattered.

650 Q. Didn't you leave there and go over and make up this game?

A. No sir.

Q. Do you remember visiting the southwest corner of the Tecumseh claim while you were up there?

A. I think we attempted to visit it at all of the corners, yes sir; I may be a little off on the topography or the points of the compass.

Q. The southwest corner was the one that was a witness corner over by the railroad?

A. Yes sir.

Q. You may state whether or not Mr. Smith, a guide appointed on the part of the defendants, pointed out a stake that he had driven there to fix the true place of the southwest corner?

Defendants object; there is no such charge as that in this affidavit or in this motion; which objection was by the court sustained, to which ruling of the court the plaintiff, by his counsel then and there duly excepted.

Plaintiff offers to show by the witness that James F. Smith, who was appointed by the court, as a guide on the part of the defendants to visit the property in question, made an independent survey of the true place where he claimed the southwest corner post should have been driven; that he drove a stake at that point, and upon the occasion of the jury viewing that corner, he pointed out to them this stake, and explained to them that he had made a survey and that this stake was driven at the point where the corner would, of right, fall, and that this survey was made after the case was closed.

Which offer of proof was by the court excluded; to which ruling of the court plaintiff then and there duly excepted.

Q. Did all of the jury go down and take a view of this property—go down the shafts?

651 Defendants object; which objection was by the court sustained to which ruling of the court the plaintiff then and there duly excepted.

Q. Mr. Mangold, did you make a deposit of money in the First national bank shortly after you came off of that trial?

A. Yes sir.

Defendants object, being immaterial and not contained in any specific charge in the motion; which objection was by the court sustained; to which ruling of the court plaintiff then and there duly excepted.

WITNESS: If the court please, may I be heard for a moment?

Q. What was the amount of that deposit?

A. A draft for $500.

Q. Whose draft was it, by whom was it drawn?

A. It was drawn by the Deshler National Bank of Columbus, Ohio, on the American Exchange national bank, payable to me.

Q. How did you receive it?

A. I received it from the hands of my wife; she opened the letter which was received during my absence on the jury.

Q. She received it by mail?

A. Yes sir, a letter addressed to me.

Q. You may state whether or not Mr. Bowers was in attendance upon the jury after they retired to consider the case, until about dinner time that evening?

A. I don't remember whether he was; I suppose they were both in charge.

Q. That is what I asked you, whether Mr. Bowers was there at all?

A. Yes sir, I think they were both in charge, both bailiffs as near as I can remember it.

Q. Do you remember that he was?

A. I remember that he was at dinner with another jury.

Q. Was he in attendance with your jury at all until evening.

A. He had been, yes, for a week or ten days.

652 Q. I mean during that time after you had been charged and retired to consider of your verdict?

A. I don't know when he left us or anything about it; I know that he was in to dinner with the jury, but when he left us I don't know.

Q. Did he come to the hotel about the time you were there at dinner?

A. I couldn't tell you about that; I don't know when he got there, whether he was there when we got there, or came afterwards, I don't know.

Q. You may state whether or not you were permitted to separate from the balance of the jury that evening?

Defendants object; which objection was by the court sustained; to which ruling of the court the plaintiff then and there duly excepted.

Plaintiff offers to prove by the witness that he was permitted to absent himself from the balance of the jury on three different occasions during the evening after the jury had been charged, and that while so absent, from the balance of the jury, he was left alone portions of the time by the bailiff, and portions of the time he was with the bailiff Bowers, and that he had opportunities to converse with other parties not in the presence of the jury. Which offer of proof was by the court excluded; to which ruling of the court the plaintiff then and there duly excepted.

Cross-examined by Mr. THOMAS:

Q. Mr. Mangold, from whom was that draft of $500 received?

A. From my father.

Q. Where does your father reside?

A. Columbus, Ohio; I have the letters here to prove it.

653 Q. Running over what period of time?

A. There is a letter here in December; I don't know

whether that refers to the matter or not; they are in German and I have to have them read to me by a German here.

Q. Was that the culmination of a previous correspondence in regard to money matters?

A. Yes sir.

Q. Did it have anything whatever to do with this trial?

A. Not at all.

Redirect examination:

Q. You may state whether or not the jury in this case stood upon the first ballot 7 to 4, one not voting, and that they remained that way for several ballots?

Defendants object; which objection was by the court sustained; to which ruling of the court the plaintiff then and there duly excepted.

Plaintiff offers to prove the facts recited in the question.

Which offer of proof was by the court excluded; to which ruling of the court plaintiff then and there duly excepted.

Q. You may state whether or not you introduced into that jury-room the argument that as the defendants had had one new trial as a matter of right, and the plaintiff would have the right to a new trial same as the defendants had, it would only be fair to find for the defendants, and thereby put the parties on an equality?

Defendants object; which objection was by the court sustained; to which ruling of the court plaintiff then and there duly excepted.

Plaintiff offers to prove the facts recited in the question.

654 Which offer of proof was by the court excluded; to which ruling of the court plaintiff then and there duly excepted.

M. F. BOWERS, being first duly sworn, testified as follows:

Mr. THOMAS: I desire to interpose the same objection generally to the testimony of this witness that I did before.

Objection overruled, defendants excepting.

Q. What is your name?

A. M. F. Bowers.

Q. Where do you reside?

A. Colorado Springs.

Q. I believe you were formerly sheriff of this county?

A. I was.

Q. Were you a deputy sheriff prior to this term of court?

A. I have a commission that is not recorded.

Q. Did you have that commission prior to the trial of this case?

A. I had.

Q. A commission from Sheriff Boynton?

A. Yes sir, a special commission.

Q. A special commission as deputy sheriff?

A. Yes sir.

Q. Were you occasionally called upon to render services as deputy?

A. I have never been called on.

Q. How long did you hold that commission?

A. I had one during the first term of Mr. Boynton, and when he took the office in January he sent me one by mail.

Q. You were put on this special venire, were you not?

A. I was notified to be here, but I was not called.

Q. You were summoned, were you not, as a special?

A. I was summoned, I didn't know what for or what was the nature of the case or anything about it.

655 Q. You ascertained after you got here what case it was?

A. After I got into the court-room, yes.

Q. Where were you when you were summoned?

A. I was at my residence, 724 North Nevada.

Q. Who served the summons?

A. Ray, the clerk in the sheriff's office, a deputy sheriff; I forget his name, he is the stenographer down there.

Q. Had you received any suggestion before that that you might be called as a juror?

A. No sir.

Q. You were not called that morning when the jury was empanelled?

A. No sir.

Q. Did you remain about the court-house?

A. I remained here a few minutes; at that time the Chamberlin case was in progress in division 1, and the sheriff asked me if I would go over there and assist the doorkeeper there, which I did.

Q. What time did the trial of that case commence?

A. I think it commenced at 10 o'clock that morning.

Q. How soon after they secured a jury of 12 and commenced the trial?

Defendants object.

Q. The case here was called at half past 9 o'clock was it not?

A. I think so; I am not positive; I was notified to be here at half past nine.

Q. As a matter of fact wasn't the jury empanelled here in this division of the court before it was in the criminal case over there?

A. That I could not say; I was not in the other court; when I went over there the jury was in the box.

Q. A jury of 12 had been selected?

A. They hadn't been selected; they were called, and they were examining the jurors when I went in there, the attorneys.

656 Q. The jury had been selected here before you left?

A. Yes sir.

Q. Mr. Bowers, did all of the jury go down and view the property?

A. The shafts do you mean?

Q. Yes sir?

A. Not all.

Defendants object to the question and move to strike out the answer because immaterial and there is no charge of specific misconduct of any kind against the jury; also because the failure of the jury to inspect the underground workings is not misconduct. Objection overruled, defendants excepting.

Q. How many of the jury failed to go down the shaft?

A. There were four or five different shafts there; some went down in one shaft and did not go down in the others; Mr. Harbaugh was rather under the weather; I think there were one or two that he did not go down in, I would not be positive though; I went down in all of them myself.

Q. Were there not two jurors, Mr. Donelly and Mr. Cell, who did not go down either of the discovery shafts?

A. My recollection is that they did.

Q. That they did go down those shafts?

A. I think so.

Q. Didn't Donelly and Cell stay on the surface after the jury went down and examined the Ophir discovery shaft and the Tecumseh discovery shaft, and didn't you stay there with them?

A. No; I couldn't swear as to whether they went down there or not; I went down in all the shafts myself and stayed at the bottom; Mr. Welch was not feeling well, and he stayed on top with the remainder of the jury that did not go down; they couldn't all get down in there at the same time; and whether they all went down or not I could not say; I didn't keep count of them, I simply
657 went to the bottom and stayed there until they all got through.

Q. How many of the jury did not go down the Tecumseh shaft, for instance?

A. I could not say.

Q. Did they all go down?

A. I don't think they did.

Q. Didn't at least two of the jury stay on the surface, when the balance of the jury went down?

A. There was one shaft that only one of the jurymen went down.

Q. I ask you about those discovery shafts; I don't care about the others?

A. I say I can't remember; I didn't pay any attention to the number that went down; I simply went down first.

Q. You went there as a bailiff in charge of the jury, and you say you didn't pay any attention to what they were doing?

Defendants object; he didn't say that.

Q. As to who went down the shaft to view the property, that you were sent there to view?

A. I went down, as I said before, I went down in the bottom of the hole in each of the shafts and stayed there until they all got through and went up the shaft and then I came up, and Mr. Welch was on top on the surface, and I didn't keep count or take the names of the jurors that went down the shaft; whether they all went down or not I couldn't say.

Q. When you came to the discovery shafts of the Ophir and Tecumseh you all went there in a body, you two bailiffs with the 12 jurors?

A. Yes sir.

Q. And the guides?

A. Yes sir.

Q. Wasn't it understood there and discussed that certain of the jury would not go down, and wasn't it stated by the other bailiff that those who did not care to go down need not go down; didn't you hear that statement?

658 A. I heard that statement; some of them were not able to go, or not feeling well, or at least they said they were not.

Q. You didn't hear any one complaining of not feeling well there except Mr. Harbaugh, did you?

A. Yes, Mr. Cell said he was not feeling well; he told me so himself.

Q. How about Mr. Donelly?

A. I didn't hear him say anything about it.

Q. What was the sort of statement that Mr. Welch made there to the jury?

A. He read the instructions that were given him by the court when he left here to all of them and to the guides, and some of the jurymen were not feeling well, and he told them they could use their own discretion about going down, if they didn't feel able to go they didn't have to go, or words to that effect.

Q. He made this statement generally to the jury, that it was a matter of their discretion whether they would go down or not?

A. Some of the jurymen—Mr. Harbaugh said he was not able; in fact he was not able to walk around; he rode a horse to the railroad, one of the guides' horses from the station.

Q. He went down both shafts, didn't he?

A. I think he did; I know he did.

Q. Did you hear any serious complaint of any one that they were sick?

A. Mr. Cell was not feeling well; he was short of breath and the altitude was too high for him, and he was not feeling well.

Q. There was not any great difficulty in going down that shaft was there?

A. No, not to a person that was not timid.

Q. Were there ladders and stulls put in there?

A. Yes sir.

Q. To make it convenient for the jury to go down and examine the different points in there?

A. Yes sir.

659 Q. Did you see Mr. Mangold playing cards with some outside parties when you were coming down on that trip?

A. He got on the train at Elkton, and Mr. Plumb and Mr. Parker, one of the county commissioners, they had a couple of seats there, and until we could get the seats cleared, so that we could get our jury together, I think Mr. Mangold sat down in the seat with them, and they were playing cards, and I think he took a hand, and as soon

as we could get the seats cleared from passengers, we explained it to them, some of them didn't want to give up their seats, and I told them that we had a jury and we wanted to keep them together, and I sat them together as soon as we could get the seats cleared; Mr. Mangold took his seat with the balance of the jury.

Q. How far was it from where you started to where Mr. Mangold sat with the balance of the jury?

A. Probably five minutes before we got them fixed; I could not swear positively, I didn't pay any attention to the time; Mr. Plumb and Mr. Parker were men that I didn't think would interfere in any manner with the jury; they sat down with them and as soon as we got the seats cleared, he took his seat with the balance of the jury and we proceeded on our way and kept them together.

Q. What time of day was it that you were appointed bailiff to take charge of this jury, the first day, or the first time?

A. I think it was Thursday at noon, I forget the date, or in the afternoon, I would not be positive; no, it was Thursday forenoon; Mr. Boynton the sheriff came into the other court and asked me if I would go in and assist Mr. Welch with his jury.

Q. Were you sworn as a bailiff at that time?

A. I think I was sworn in the afternoon—that is, when court convened.

660 Q. Were you sworn at any time, except at the time you were sent up there with this jury to view the premises?

A. Yes sir.

Q. You were?

A. I think I was, yes sir.

Q. You were sworn at the time the jury were charged and retired?

A. Yes sir.

Q. Were you specially sworn again?

A. When the jury was sent up to Cripple Creek?

Q. No, when they retired to consider of their verdict?

A. Yes sir.

Q. You were sworn then three times according to your recollection?

A. Yes sir.

Q. When, for the first time, did you have anything to do with the jury after they retired to consider of their verdict?

A. I stayed out in the hall there most of the time to answer their calls, if there was any.

Q. Were you not in attendance on the other court?

A. You mean when the jury took the case to deliberate on the case?

Q. Yes sir?

A. No sir.

Q. Didn't you have charge of another jury that day?

A. Not at that time, no sir.

Q. Didn't you have another jury to dinner that day?

A. What day are you speaking of?

Q. I am speaking of the day after the case had been closed, and

the jury had been charged and taken to their room to consider of their verdict?

A. No sir, I had nothing to do with the other jury after Thursday, the second day after the case commenced; I had nothing to do with the other jury after that.

Q. Did you go with this jury in this case to dinner, that is
661 at 12 o'clock in the middle of the day, and to a later dinner when they went to their room?

A. This jury?

A. Yes?

A. Yes sir.

Q. Isn't it a fact that after this case closed and the jury retired to consider of their verdict, that you were not in attendance on the jury at all until evening?

A. No sir.

Q. Isn't it a fact that you went down to the hotel that evening at dinner time to see Mr. Mangold?

A. I think you are getting mixed up on the dates; the last question I understood was with reference to after the jury had got the case to deliberate.

Q. That is the time I am talking about, after the entire case was closed and the arguments closed and the instructions closed and they had retired to make up their verdict; that is the time I am talking about now and have been for some time. My other question related to whether you were in attendance on that jury during the time after they were charged by the court and finally took the case?

A. I was with the jury from noon Thursday until after the verdict was brought in and the jury discharged continuously, day and night.

Cross-examination by Mr. THOMAS:

Q. You mean by the last answer that from the time that you took charge of the jury, as bailiff during the trial, you were with them until they had returned their verdict?

A. Yes sir.

Q. At the time that you were asked to take charge of this jury, Mr. Welch was too ill wasn't he to continue the performance of his duties as a bailiff, and had to go home?

A. Yes sir.

Q. And owing to that fact you took his place in the court-room, and took charge of the jury?

A. He was present.

662 Q. He was about but he was not able to perform the regular duties of a bailiff?

A. No.

Q. How far did Mr. Mangold sit away from the other jurors, about how many seats at the time that he was with Mr. Plumb and Mr. Parker?

A. Just across the aisle.

Q. How far were the bailiffs, or either of them, from him at that time?

A. Either one or the other of us was right standing in the aisle waiting until we could get the seats cleared to get them together; I think I was sitting on the arm of the seat.

Q. You afterwards got the jury together?

A. Yes sir.

Q. Who were in the seats with Plumb and Parker and Mangold as a fourth man, if any one?

A. I don't remember.

Q. Was it another juryman or was it an outsider?

A. I think it was, I could not swear positively.

Q. You don't remember whether it was or not?

A. No sir.

Q. Was there any discussion of this case in any way between Mangold and either of the three men, or anybody else, on that occasion?

A. There was not.

Q. How old a man was Mr. Donnelly?

A. I think he is a man about 60 years of age.

Q. Somewhat advanced in years?

A. Yes sir.

Q. As I understand when you got up there you went down under ground yourself, and Mr. Welch stayed above ground, that is the way you divided your duties during the examination?

A. Yes sir.

Q. Who was it besides Mr. Cell that complained of being unwell?

A. Mr. Harbaugh.

Q. Did Cell or Harbaugh, so far as you know, go into any shafts, or part way into any of them?

663 A. In fact I know they both went into some of them, but whether they went into all or not, I don't know.

Q. How about the discovery shafts?

A. It was the discovery shafts.

Q. Did the investigation of the jury, or any great number of them, in the Ophir shaft, go below the 34-foot point where there was a platform?

A. Only one.

Q. Only one went below that point?

A. Yes sir.

Q. In the other shaft, do you know whether they all or only a part of them went into the shaft?

A. I don't think they all went down in there.

Q. Either partly down or entirely down?

A. They may have all went down; I could not say; I was down in the bottom myself.

Q. Mr. Cell and Mr. Harbaugh complained of not feeling well?

A. Yes sir.

Q. Apart from Mr. Donnelly, have you any distinct recollection about the manner in which the others examined the workings?

A. They examined the workings very thoroughly.

Q. How long were you upon the ground—about how long?

A. We got in there about noon, possibly a little before noon, about half past 11 o'clock.

Q. While holding a commission from the sheriff's office, as a deputy which you say was not recorded, did you discharge, or were you called upon to discharge any of the duties of a deputy?

A. No sir.

Q. You were not a member of the active force?

A. No sir.

Q. For what purpose was this commission held?

A. During the first term I requested a commission for my own special reasons, and at the beginning of the second term he just made out a commission and sent it to me without solicitation.

664 Q. Specially designating you as a deputy sheriff, but without being attached to the active force of deputies?

A. Yes sir.

Redirect examination:

Q. You say that only one juror went down to the bottom of the discovery shaft of the Ophir?

A. The 80-foot shaft is that the one?

Q. Yes.

A. Only one went below that.

Q. Only one went below 30 feet—the stull that was put in at 30 feet?

A. Yes sir; there was only one went below and I went with him.

Q. Do you know whether Mr. Cree is also a deputy sheriff?

A. I don't know.

W. L. Cook, being first duly sworn, testified as follows:

Mr. Thomas: I desire to save the same objections to the examining of this witness that I made to the other two.

Q. Where do you reside?

A. Colorado Springs.

Q. What office do you hold, if any?

A. I am undersheriff of this county.

Q. You returned a special venire in the case of Beals *v.* Cone, I believe, did you not?

A. I think so; we had a special venire in that case.

Q. Do you remember whether you made the return or not?

A. No, I don't know whether I made it myself or whether Mr. Boynton did; I don't remember.

Q. Do you know who selected the jury, the men to be served in that case?

Defendants object; there is no specific charge of misconduct here against either the sheriff or the undersheriff or any one else
665 in the preparation of any list, or the selecting of any specific names to be put upon the special venire.

Objection overruled; defendants excepting.

A. Mr. Boynton selected some of them, and Mr. Bradfield some of them, and I selected some myself; that is I went out and found them.

Q. Wasn't the list made up there in the office and parties sent out to notify them?

A. No sir, we never do that with a special venire.

Q. Who did you select—what part of the jury?

A. I think if I should see the list I could remember, I didn't give any particular attention to it at the time, and I don't know that I could tell you exactly.

Q. There were selected there several deputy sheriffs were there not—persons holding commissions as deputy sheriffs?

A. I don't remember who the names are on the list.

Q. F. A. Mangold is one; he was a deputy sheriff, wasn't he?

A. F. A. Mangold has a complimentary commission as a special deputy without pay; he has no connection with our office.

Q. Mr. Bowers also holds a commission does he not?

A. He holds the same kind of one Mr. Mangold does.

Q. Mr. Cree holds a commission of that kind, does he not, and is now an active deputy is he not?

A. He is not an active deputy and never has been.

Q. Hasn't he been doing some duties as a deputy since the trial of that case?

A. Not that I know of.

Q. But he holds a commission, does he?

A. Yes sir, he holds the same kind of a commission Mr. Mangold does.

666 Q. Did any of the others of that special venire hold commissions as deputy sheriffs?

A. If you will tell me their names I can tell you; I could not tell without.

Defendants object unless the question is directed to some man who was actually selected and sworn as a juror in the case. Which objection was by the court sustained; to which ruling of the court, plaintiff then and there duly excepted.

Q. This is the special venire; which ones of those jurors did you select?

A. I think Mr. Cree and Mr. Bowers were the two that I selected.

Q. Did you serve Mr. Bowers?

A. I sent a man up to his house, and he came down to the office and I served him there.

Q. You sent a man up there to his house for him?

A. Yes sir.

Q. Who did you send?

A. I sent Ray Rees, a clerk in our office.

Q. You served Mr. Cree there in the office?

A. Yes sir.

Q. Mr. Cree was a deputy, wasn't he?

A. I served Mr. Bowers in the office, too; Mr. Cree is a special deputy.

Q. Did you serve Mangold?

A. I don't think I did.

Q. Who selected the others?

A. I don't know who selected them; I suppose either Mr. Boynton or Mr. Bradfield, we were all three trying to get the jury as quick as we could; we did not make up any list.

Q. Had you any knowledge that Mr. Bowers would be at his house that time in the morning?

A. He was usually there at that time; yes, we supposed we would find him there.

Q. Why did you particularly want him?

667 A. It was necessary to get a certain number of men, and we usually think over who we can send for, and where we can get men the most convenient—good men.

Q. You don't start out to find men on the street or in business places?

A. We usually did that; that was where we found these men, out on the street.

Q. You didn't find Bowers on the street?

A. We found him at his house; we went after him and had him come in.

Q. Didn't you make up a list there of the men you wanted and send for all of them?

A. No sir.

Q. Who else than Bowers did you send for that day?

A. I think Mr. Harbaugh was sent for.

Q. Who selected him?

A. I could not tell you; when we got the special venire we started out to get men to fill it.

Q. You generally go out and fill them with men as you meet them, or to business places, don't you, without sending off after them to come in?

A. That depends on whether we can pick up good men on the streets or not.

Q. Did you leave the office to find any one?

A. No sir.

Q. Did any one leave the office to find any one except to go and get the ones that were selected?

A. Mr. Bradfield after he could get outside. There was no list made up and no men sent for that I know of, except Mr. Bowers and Mr. Harbaugh; Mr. Boynton was helping get this jury and Mr. Bradfield.

Q. I will ask you whether ten men were not practically selected there in the office the same as Bowers before you sent out after them?

A. No sir, they were not.

Q. You say Harbaugh and Bowers were selected there and sent for?

A. I remember those two men being sent for.

Q. Why were these men especially sent for?

A. Because we thought they would be good men.

667½ Q. Didn't you think you could get ten men in the city of Colorado Springs without sending specially to their houses for good men?

Q. We could not get them without we either sent, or went or something.

Q. How many deputy sheriffs are there amongst those ten men?

A. There are three special deputies on that list.

Q. Wasn't Mr. Cree put upon active duty just after he was summoned on the jury?

A. He never has been on active duty.

Q. Mr. Bowers was put in service wasn't he, and has been ever since?

A. Mr. Bowers has been bailiff in this division of the court.

Q. Do you generally make up your special venires of persons holding commissions as deputy sheriffs in your office in that proportion?

A. I don't know whether we ever had a deputy on or whether we might not have had them on every time; we don't calculate that a man who holds a special commission has anything to do with our office. It is a complimentary commission only; it carries no pay with it.

Q. Do you know how it happened that when Mr. Bowers was not selected to act on this jury, he was selected to be bailiff over the jury that was in the case?

A. We have nothing to do with selecting the bailiff.

Q. Who does select him?

A. The court.

(No cross-examination.)

C. R. MANNING, being first duly sworn on the part of the plaintiff, testified as follows:

Q. You are the deputy clerk of this division of the court?

A. Yes sir.

Q. Do you remember the morning on which the jury was
668 empanelled in the case of Beals *v.* Cone?

A. I remember, yes, empanelling the jury in that case.

Q. Do you remember whether or not any jurors had been called prior to the order for the special venire?

Mr. THOMAS: They were not; I will admit that.

A. You mean any of the regular panel?

Q. Yes?

A. Yes sir, they were all called before the special venire was called.

Q. The question is whether any of the regular panel were called before the court ordered a special venire to issue?

A. I could not say as to that.

Mr. THOMAS: If there is any point in that, I will admit that there

were no jurors called into the box until the special venire had been ordered.

WITNESS: I think that is the fact, yes.

Q. Did you arrange these last jurors in the order in which they were called?

A. I did, if it is my list, yes sir.

Q. Weren't some of those on the special venire called before all of those on the regular panel were called, that served on this jury?

A. I think not.

Q. Do you not find that Cree's name there precedes the name of some of the regular jurors?

A. Yes sir, it does.

Q. Wasn't Paul Dingle, D. L. Cell—were they not on the regular panel?

A. On the regular panel, yes sir.

Q. As a matter of fact don't you put the names of the jurors on the regular panel and the jurors on the special venire in a box and draw from that box?

A. No sir, I think not.

Q. How do you account for Cree's name being above the
669 names of those jurors on the regular panel?

A. I don't know that I can account for it; I have in my mind how it might happen in two or three ways, but whether it did happen that way or not I don't know, I have no recollection.

Q. Do you remember the time that Mr. Bowers was introduced here as a bailiff to serve on the jury?

A. You mean the exact time?

Q. Yes sir.

A. No sir, I do not.

Q. Do you remember the circumstance?

A. I remember he served as a deputy, yes sir.

Q. Was he sworn?

A. I could not say whether he was or not; I presume he was.

Q. Did you swear him?

A. I swore him if he was sworn; I couldn't say whether I did or not; I don't remember.

Q. Do you keep any record of those things?

A. The only record that I would have would be charging it up on the fee book, for swearing bailiff.

Q. Will you examine that and see whether he was sworn?

A. I will have to go downstairs.

Q. Before the case is over?

A. Yes sir.

Cross-examined by Mr. THOMAS:

Q. You might or might not have made a record of it?

A. Of course, I might have omitted to make a record of it.

J. W. CARR being first duly sworn, testified as follows:

Mr. THOMAS: I object to Mr. Carrs being sworn; I understand that the order permitting the examination of witnesses orally was made upon a showing, the effect of which was that a number of people who were acquainted with the facts upon which this
670 motion for a new trial was based, were unwilling to give affidavits. Mr. Carr has made and there is on file the principal affidavit in this case, and that being the case it seems to me that he is excluded from this oral examination.

Gen. JOHNSON: I desire to examine him as to one or two points not covered by the affidavit.

The COURT: You can use the affidavit, or his oral testimony, as you prefer, but not both; anything that he has testified to in the affidavit there is no use of his testifying to now. If he has an affidavit on file, I think it better be used, and you can examine him as to anything outside of the affidavit.

Thereupon counsel for plaintiff read the affidavit of the said J. W. Carr, and the same is in the words and figures following:

J. W. Carr being first duly sworn, deposes and says: That he is acquainted with F. A. Mangold, one of the jurors who sat in this case during the trial of same, which began to wit: February 9th, 1898; that after the evidence had been presented, arguments made by counsel, the jury instructed by the court and the case submitted and given to the jury to decide, and during the deliberations of the jury in attempting to arrive at a verdict in said case, said F. A. Mangold was absent from the remaining jurors in said case for a period of at least twenty minutes; that during that time he was separated from the jury, did not deliberate with them, and was not confined with them, but was absent from said jury, and was in another room, or part of the Alamo hotel in Colorado Springs, Colo. Affiant states that during the absence of F. A. Mangold above mentioned, the remaining jurors were in one
671 part of said hotel and said F. A. Mangold was in another part of said hotel. And that during the time said Mangold was absent from the jury and at the time that Mangold was in the room by himself, a person unknown and a stranger to affiant stood in the Tejon Street door of the room in which said Mangold was in and remained there a few minutes until he noticed affiant when he immediately left and walked rapidly north from the Alamo hotel on Tejon St.

Affiant further states that during the trial of the above case after eleven of the jurors had taken their seat in court, one of the jurors, E. W. Hull and M. F. Bowers, bailiff in charge of the jury, did not come into court with the jury, but remained outside of the court-room four or five minutes, and then came into the court-room together.

Affiant further states that he was present at the time the jury viewed the premises in controversy at Cripple Creek, and that two of the jurors did not view or examine either shafts in controversy,

and that only one of the jurors, of the twelve, went down into the Ophir shaft and examined that portion of the work which was testified to as being the work done as assessment-work for the year 1897, and that the other eleven jurors in said case did not make any examination whatever in any manner of the work which was testified to as the '97 assessment-work of the defendants at the bottom of the Ophir shaft.

J. W. CARR.

Subscribed and sworn to before—

IRA J. H. SYKES,
Notary Public.

March 3rd, 1898.

Q. You may state whether or not you were present with the jury at the time they examined the southwest corner of the Tecumseh?

672 A. I was, yes sir.

Q. Was Smith there?

A. Yes sir.

Q. Who else was there?

A. All of the jurors, I believe, and Mr. Dahl.

Q. Mr. Dahl who was a witness on the trial?

A. Yes sir.

Q. You may state what Smith told the jury with reference to that corner?

Defendants object for the reason that that matter was called to the attention of the court, prior to argument, and the jury instructed with reference thereto, and it is not a matter that can be made a matter for cause for a new trial.

Mr. JOHNSON: I want to show what Mr. Smith did and said and submit to your honor whether or not your instruction to the jury not to consider it, cured it.

Objection overruled; defendants excepting.

A. He showed us the corner, a stake that he had driven there by a survey that he had made a day or two before, which represented the southwest corner of the Tecumseh survey, as described in the location certificate.

Q. Had that survey or that stake been alluded to in testimony on the trial?

A. No sir.

Q. What kind of an embankment did that stake stand upon if any?

A. It was an ordinary railroad embankment of earth, well down, pretty well to the foot of the embankment.

Q. At what angle is that embankment?

A. Originally I suppose about 45 degrees, or one foot in elevation to one foot horizontal measurement; in other words, the slope of the bank would represent an angle of 45 degrees, representing the hypothenuse of a triangle whose base and perpendicular were equal.

673 Q. On which slope was that stake driven?

A. It was driven on the western slope.

Q. Would that be on one of the slopes to the side of the track, or on a slope under the trestle-work?

A. No, it would fall on the slope under the trestle-work, but a little to the side of the track, also.

Q. But it would be on the embankment or slope under the trestle-work?

A. Yes sir.

Q. If that stake was extended it would come up between the rails?

A. No sir, I don't think so; no, I know it would not.

Q. Would it go under or between the ties or any one of the ties?

A. It would not be very far from the ends of the ties; I don't think it would come up even to the ends of the ties, scarcely.

Q. Was that embankment what you would call on precipitous ground?

Defendants object; which objection was by the court sustained; to which ruling of the court the plaintiff then and there duly excepted.

Q. You say Mr. Dahl was there?

A. Yes sir.

Q. You may state whether or not Mr. Dahl joined you at Elkton and went with you and the jury all around as long as you were with the jury—whether Mr. Dahl was with them?

A. He was.

Cross-examined by Mr. THOMAS:

Q. When you returned to Colorado Springs, after the jury had made their examination, you reported to your counsel all about the stake that Mr. Smith had set, and the fact that the jury had their attention called to it, didn't you?

A. I don't remember just what time I did explain to them that circumstance.

Q. You told them about it before argument of counsel to
674 the jury, didn't you?

A. I don't remember about that, Mr. Thomas.

Q. Well, you told them about it?

A. I certainly did tell them about it.

Q. Before the case went to the jury?

A. I don't know as to whether it was before.

Q. You were not in court at the time Gen. Johnson called the attention of Judge Harris to the fact of the setting of this stake?

A. Yes sir.

Q. And the fact that the jury's attention was called to it?

A. Yes sir.

Q. Whereupon counsel for both plaintiff and defendant united and requested the court to instruct the jury that they should disregard the matter?

A. Yes sir.

Q. You were in court when that was done?
A. Yes sir.

Thereupon plaintiff offered in evidence the affidavit of H. B. Johnson, Ralph W. Smith and Joseph H. Beals, and the same is in the words and figures following:

Mr. THOMAS: Our objection, understand, to the introduction of any testimony on account of the general character of the grounds assigned in the motion, goes to the affidavits as well as to the oral testimony.

H. B. Johnson, Ralph W. Smith and Joseph H. Beals, being first duly sworn on oath severally say: That the facts and circumstances alleged in the motion for a new trial now on file in said cause, and which are set forth in the affidavits filed in support of the same, and which will be relied upon in oral testimony adduced in support of said motion, did not come to our notice or knowledge until after the jury had been charged and retired to consider
675 of their verdict.

H. B. JOHNSON.
RALPH W. SMITH.
JOSEPH H. BEALS.

Subscribed and sworn to before

ALBERT GIESECKE.
A Notary Public.

March 7th, 1898.

Plaintiff then offered in evidence the affidavit of Henry Kelly, and the same is in the word*a* and figures following:

Henry Kelly being first duly sworn, deposes and says: That he is acquainted with F. A. Mangold, one of the jurors who sat in the above case during the trial of same, which began, to wit: February 9th, 1898. That after the evidence had been presented, arguments made by counsel, the jury instructed by the court and the case submitted and given to the jury to decide, and during the deliberation of the jury in attempting to arrive at a verdict in said case, said F. A. Mangold was absent from the remaining jurors in said case for a period of at least twenty minutes; that during that time he was separated from the jury, did not deliberate with them, and was not confined with them, but was absent from said jury and was in another room or part of the Alamo hotel or elsewhere in Colorado Springs, Colorado. Affiant further states that during the absence of F. A. Mangold above mentioned, the remaining jurors were in one part of said hotel, and said F. A. Mangold was in another part of said hotel, or elsewhere, and that said F. A. Mangold was separated and absent from the jury during the time above mentioned, to wit: on the 17th day of February, 1898; and again about 9 o'clock p. m. of said day said Juror Mangold was separated from the remaining jurors and in a different room; and again about 10 o'clock of the said night said Juror Mangold was separated from said eleven

remaining jurors and was in company with Bailiff Frank
676 Bowers.

HENRY KELLY.

Subscribed and sworn to before Thornton H. Thomas, a notary public, February 3rd, 1898.

Plaintiff then offered in evidence the affidavit of Ralph W. Smith, and the same is in the words and figures following (after the title of the cause):

Ralph W. Smith being first duly sworn, deposes and says: That he received from Richard Le Bert, United States Surveyor General, the within papers and certificates, marked Exhibit "A" and hereto attached.

RALPH W. SMITH.

Subscribed and sworn to before—

——— ———,
Notary Public.

EXHIBIT A.

Address only the Commissioner of the General Land Office.

"N."	DEPARTMENT OF THE INTERIOR,	W. O. C.
G. F. P.	GENERAL LAND OFFICE,	J. V. W.
	WASHINGTON, D. C., *February* 11, 1898.	H. G. P.

U. S. Surveyor General, Denver, Colorado.

SIR: In a letter of January 13th, 1898, to the department in the case of the Hull City placer, Pueblo mineral entry No. 421, with reference to the survey of said claim, it was stated that the
677 order for the survey of the claim was issued January 9, 1893, to James F. Smith, U. S. deputy mineral surveyor, and that Smith made the final oath required by the deputy in the return of the survey to your office. In said letter it was also stated that Smith did not in fact make such survey; that he was not in the field when it was made; that it was made by an employé in Smith's office, who at the time was not a deputy mineral surveyor, and it was recommended that Smith's commission be revoked.

I enclose herewith a copy of departmental decision dated February 2, 1896, which is as follows:

Referring to your letter of January 13, 1898, making recommendation in the case of W. S. Floyd *et al. v.* W. S. Montgomery *et al.* I have to advise you that I fully concur in your recommendation therein made that James F. Smith's commission as a deputy United States mineral surveyor be revoked, and it is requested that you take such proceedings in the premises as may be necessary to carry your recommendation into effect.

In accordance therewith you will give due notice to James F. Smith that his commission as a U. S. deputy mineral surveyor is

hereby revoked. You will make the proper notation on y records.

Very respectfully,

(Signed) BINGER HERMANN,
Commissione

(B–8.) (Copy.)

W. V. D. DEPARTMENT OF THE INTERIOR,
WASHINGTON, *February* 2, 189

To the Commissioner of the General Land Office.

SIR: Referring to your office letter of January 13, 1898, mak recommendation in the case of W. S. Floyd *et al. v.* W. S. M gomery *et al.* I have to advise you that I fully concur in y
678 recommendation therein made that James F. Smith's c mission as a deputy United States mineral surveyor be voked, and it is requested that you take such proceedings in premises as may be necessary to carry your recommendation i effect.

Very respectfully, C. M. BLISS, *Secretar*

I hereby certify this to be a correct copy of the original letters file in this office.

U. S. surveyor general's office, Denver, Colorado, March 1898.

RICHARD LE BERT,
Surveyor General of Colorad

Plaintiff then offered in evidence the following list of p jurors:

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

The following is the list of petit jurors serving on the regu panel of the jury for the January A. D. 1898 term of said court, the 9th day of February, A. D. 1898 in the trial of The People Guy Seaman, No. 2951.

Chas. Fical	C. M. Brewer
Clyde Hall	C. P. Shore
George H. Baird	O. A. Rusk
A. G. Spencer	S. A. Matthews
C. E. Knapp	J. D. Turner
Thos. O'Toole	J. B. Shumaker.

The following is the list of petit jurors serving on the regu panel of the jury for the January A. D. 1898 term of said court, the 9th day of February, A. D. 1898, in the trial of The Peopl Wood, No. 2950.

679

S. M. Goodale	A. M. Coleman
Sid Davis	H. M. Ward
Wiley Mow	W. W. McConnell
C. I. Stevens	E. C. Brown
J. R. Millard	Ben Harrison
John Callahan	C. M. Sherman.

I, Edgar Howbert, clerk of the district court of the fourth judicial district of the State of Colorado, within and for the county of El Paso, do hereby certify the above and foregoing to be a true, perfect and complete list of the petit jurors serving on the regular panel at the January A. D. 1898 term of said court, in the cases of The People of the State of Colorado *vs.* Guy Seaman and the cases of The People of the State of Colorado *vs.* Wood, No. 2951 and 2950 respectively.

In witness whereof I have hereunto set my hand and affixed the seal of said court at Colorado Springs, this 5th day of March A. D. 1898.

[SEAL] EDGAR HOWBERT, *Clerk*,
By E. C. DAVIS, *Deputy*.

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

I, Edgar Howbert, clerk of the district court of the fourth judicial district of the State of Colorado, within and for El Paso county, do hereby certify that there are no orders of court transferring any portion of the jurors on the regular panel from division two to division one of said court, prior to February 9th, 1898.

680 In witness whereof, I have hereunto set my hand and affixed the seal of said court at Colorado Springs, this 5th day of March, A. D. 1898.

[SEAL.] EDGAR HOWBERT, *Clerk*,
By E. C. DAVIS, *Deputy*.

681 Plaintiff then offered a list of the regular panel of jurors as follows:

STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

D. L. Cell,	Wiley Mow
Andrew Miller	W. E. Falkner
John Callahan	C. W. Finley
James Catron	S. M. Diltz
R. G. Mullen	O. H. Bishop
Peter Peterson	Charles Fical
A. C. Pearson	H. R. Chapman
B. A. Banta	August Miller
Sid Davis	J. T. Sanderson

Paul Dingle	J. C. Brinkerhoff
W. Pring	J. S. Brown
W. E. Riddell	George H. Baird
W. A. Perkins	J. A. Feidler
E. C. Brown,	Pat Murphy
D. F. Burson	E. A. Meredith
J. S. Arthur	Andrew Mulloy
Reuben Berry	D. N. Mercer
H. S. Poley	Ed. Lahart
A. B. McConnell	James La Mont
C. M. Brewer	John Price
W. A. Moody	E. J. Moreland
C. M. Sherman	E. T. Baker
J. E. Aiken	J. M. Bolton
R. Millard	W. W. McConnell
A. P. Lillibridge	Will Lierd
A. C. Sharp	Pat Donnelly
F. J. Loper	
O. H. Bishop } Excused for good.	Prior to February 9th,
Reuben Berry }	1898.

I, Edgar Howbert, clerk of the district court of the fourth judicial district of the State of Colorado, within and for El Paso county, do hereby certify the above and foregoing to be a true, perfect and complete copy of the list of jurors serving at the January A. D. 1898 term of said court, on the regular venire; also the list of said jurors excused from said jury prior to the 9th day of February, A. D. 1898.

In witness whereof I have hereunto set my hand and [SEAL.] affixed the seal of said court at Colorado Springs this 3rd day of March, A. D. 1898.

EDGAR HOWBERT, *Clerk*,
By M. L. TAYLOR, *Deputy*.

Plaintiff then offered in evidence the special venire, as follows:

682 STATE OF COLORADO, } ss:
El Paso County, }

The People of the State of Colorado to the sheriff of said county, Greeting:

You are hereby commanded to summon ten (10) good and lawful men, from the body of your county, to be and appear before the district court of said county forthwith, one of the days of a regular term thereof, begun and held at the court-house in the town of Colo. Springs in said county, on Monday the 10th day of January, to serve as petit jurors. And you have then and there this writ, with an endorsement thereon in what manner you shall have executed the same.

Witness, Edgar Howbert, clerk of said court, and the seal thereof, at Colorado Sprgs., this 9th day of February, A. D. 1898.

[SEAL.] EDGAR HOWBERT, *Clerk*,
By C. R. MANNIN, *Deputy*.

In pursuance of the mandate of the within writ I have executed the same by summoning, as directed in the said writ, the following named persons, to wit:

F. A. Mangold,
A. Cree
M. F. Bowers
Geo. Harbaugh
Jos. Strong
J. E. Shobe
J. C. Armstrong
Joe McCoombs
C. F. Ormsby
John Williams.

W. S. BOYNTON, *Sheriff*,
By W. L. COOK, *Undersheriff*.

683 STATE OF COLORADO, } ss:
County of El Paso, }

I, Edgar Howbert, clerk of the district court of the fourth judicial district of the State of Colorado, within and for the county of El Paso, do hereby certify the above and foregoing to be a true, perfect and complete copy of the special venire issued on the 9th day of February, A. D. 1898.

In witness whereof, I have hereunto set my hand and affixed the seal of said court at Colorado Springs, this 3rd day of March, A. D. 1898.

[SEAL.] EDGAR HOWBERT, *Clerk*,
By M. L. TAYLOR, *Deputy*.

Endorsed: Special venire. El Paso county district court. Filed —— 189–. Filed in the district court of El Paso county, Colorado, Feb. 16, 1898. Edgar Howbert, clerk, by E. C. Davis, deputy.

684 Gen. JOHNSON: There is one thing I would like to show by the deputy in the other division, that is, unless it will be admitted—that there was but one jury called for in that court in the forenoon of that day; he informed me of that.

Mr. THOMAS: I will admit that, but object to its materiality.

Plaintiff then offered in evidence the affidavit of W. J. Williams, and the same is in the words and figures following (after the title of the case):

W. J. Williams, being first duly sworn, on his oath deposes and says:

That J. W. Hawkins met me at the Florence & Cripple Creek R. R. station at Anaconda one evening in the early part of October,

1897, while I was waiting for a train, and during our conversation on my mentioning that I was interested in the Tecumseh-Ophir litigation, said he wished he had known it sooner, as he could have told me something that would have helped the Tecumseh people in that fight and I replied that the case was coming up again on December 3, 1897, and asking him to meet me at T. C. Early's office on the next evening at seven o'clock; I was not able to appear there that evening, and a few days later Mr. Hawkins called on me at my office in the National Hotel annex, and requested a private interview. As there were several people in my office, I requested Mr. J. J. Henry, who also has an office in that building, to allow me to use his office, and Mr. Hawkins and myself went in there. He then told me that Mr. Cone considered the Ophir claim as very valuable ground, and was growing desperate over the litigation and had told
him he must win this case no matter what means were used.
685 Mr. Cone told him that he (Mr. Cone) had hears that juries could be "fixed," in other words bribed, and as he was acquainted with a good many of the men who were liable to be drawn on the panel, he wanted him (Mr. Hawkins) to undertake the "fixing" of the jury in this next trial. He said he had done Mr. Cone's confidential work for a couple of years and Mr. Cone had turned to him to help him out, but he had not given Mr. Cone a definite answer but told him he would see him in a few days, and as he found out that Mr. Early was interested in this case as counsel and Mr. Early was a friend of his, he had gone to see him. I told him that if he would see that the jurymen drawn in the panel for that trial were not tampered with I would pay him well for his time, as if the case had a fair and impartial jury the Tecumseh would most surely win as soon as the jury had looked at both the Ophir and Tecumseh shafts. I then asked him to meet me at Mr. Early's office in the Fairley-Lapman block the next evening where he could repeat what he had said, and we would talk about the matter further.

The next evening we met by appointment in Mr. Early's office, and Mr. Hawkins repeated what he had told me the evening before, and added that if the Tecumseh won this time that would be the end of it, as Mr. Robison was willing to give up the fight, and Mr. Dahl, Mr. Cone's superintendent, had advised him he could not win it, but Mr. Cone was "bull-headed" and wanted to try it once more. I advised Mr. Hawkins to see Mr. Cone again, and find out what he (Mr. Cone) wanted him (Mr. Hawkins) to do and then come and see Mr. Early and myself, so we would know what to be prepared for. Mr. Hawkins came back and told Mr. Early that he had advised
Mr. Cone that it was too dangerous to undertake, and he
686 thought Mr. Cone would not attempt it without his aid. He then requested me not to mention to any one what he had told Mr. Early and myself, as it would ruin him.

The parties who were in the office when Mr. Hawkins called were C. F. Pinson, supt. Ingham Cons. G. M. Co., Mr. Fred Bruckman, assayer at Anaconda, Colorado. In the corridor of the building were Mr. F. D. Van Amburgh, owner of the building, and Mr. J. J.

Henry, secretary of the El Dora Company, to whom I preferred my request for the use of his office for Mr. Hawkins and myself, and who all know Mr. Hawkins.

W. J. WILLIAMS.

Subscribed and sworn to before—

ETHEL FRIZZELL.

February 21, 1898.

Thereupon the court overruled plaintiff's motion to strike from the files the affidavits of M. F. Bowers, F. A. Mangold and J. J. Cone, to which ruling of the court the plaintiff by his counsel, then and there duly excepted.

Defendants then offered in evidence the affidavit of F. A. Mangold, and the same is in the words and figures following:

687 STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

JOSEPH H. BEALS }
vs. } No. 4086.
J. J. CONE ET AL. }

F. A. Mangold, being first duly sworn upon his oath deposes and says: That he is a resident of the town of Colorado Springs, in the county and State aforesaid, and has been residing there for the past eighteen years; that he was one of the jurors upon the trial of the above-entitled cause had in this court during the month of February in this year; that the trial of said cause begun on or about the ninth day of February last, and continued including the time occupied by the deliberations of the jury, for a period of about ten days.

Affiant says that on Thursday the seventeenth day of February 1898, while the jury were deliberating and considering of their verdict, he was seized with sickness and faintness, resulting from an attack of biliousness of which he was suffering at the time the jury had gone into the dining-room of the Alamo hotel where they were taken by the bailiff for dinner, the hour being about 7 o'clock p. m. of said day; that the jury had been taken from the room on the ground floor of the said hotel where they had been sleeping, in the charge of David Welch, one of the bailiffs of this court.

That as soon as affiant begun to eat his dinner, and after he had taken as he now remembers only a plate of soup, he became so extremely sick, nauseated and faint, that he was unable to sit or remain longer at the table or in the dining-room which was exceptionally warm, and consequently, at the suggestion of certain of the
688 other jurors, one of the bailiffs, M. F. Bowers, was summoned and he immediately took affiant and assisted him from the dining-room into the hall of the said hotel, where the above-named bailiff David Welch took charge of him and assisted him into the room which the jury had been using for sleeping purposes above

referred to, and there assisted affiant upon his bed or cot, which was in the rear of this room not less than thirty or thirty-five feet distant from the door opening on the street, the same being the only entrance except a door in the rear which was at all times securely fastened; that when the bailiff Welch took affiant into the said room he closed and locked the door leading to the street, and affiant did not then or at any time thereafter see any persons standing at the door of said room, nor if any person was there, did such person hold or attempt to hold any communication with affiant upon any subject whatsoever.

Affiant says that after entering the room as above described he lay upon a bed suffering extremely from his sickness for a period of about twenty minutes before the rest of the jury were brought in from the dining-room and placed in the room where he lay; affiant says that during the time he was in the said room or was absent from the rest of the jury upon this occasion that the door and all entrances to the room were securely locked and fastened, and that the bailiff David Welch was present with him applying different remedies for affiant's relief; that after the rest of the jury were brought in from the dining-room, the said bailiff went out and procured mustard plasters for affiant, which were applied to him by certain members of the jury, *which* the bailiff after locking them in, went for his dinner.

689 That thereafter affiant becoming somewhat relieved, the entire jury including affiant were taken by the bailiff to the jury-room in the court-house provided for them and there affiant was again taken sick, and making a bed of some overcoats upon the floor he lay down, while the bailiff went across the street and called in Doctor W. C. Allen, who immediately visited affiant in the presence of the jurors and the bailiff, and after examining his condition, departed with the bailiff, sending medicine to affiant by the same; that an hour or so afterward, affiant having been relieved by the medicine sent him, and being obliged to respond to the calls of nature and of his body, was taken from the jury-room by the bailiff Bowers to the water-closet in the court-house, a few steps from the jury-room, and upon the same floor, but upon reaching the closet it was found to be occupied by some other member of the jury, and affiant seated himself upon a step in the hall at or near the door of the closet, in the full sight, presence and charge of the bailiff Bowers, for a few minutes, until he could gain access to the said closet.

Affiant says that during all of the time that he was out of the jury-room upon this last occasion, save and accept some stranger who came up the stairway into the upper hall of the court-house and asked affiant how he was feeling, to which he replied somewhat better, or words to that effect; but there was no further conversation of any nature between them, and as to the name of the person who addressed him, affiant does not know.

That affiant returned from the closet in the charge of the bailiff Bowers to the said jury-room where a cot had been provided for him, was made comfortable and treated with hot fomentations.

Affiant says further that he had been subject to such similar attacks of sickness for the last eight or nine years, and that
690 Doctor Allen above referred to has been his physician repeatedly in such attacks during that entire period.

Affiant says further that he never at any time prior to the rendering of the verdict talked with any person or persons about the case or any phase of it, except to the other members of the jury after the case had been submitted to them; that no person at any time ever attempted to talk with him or to approach him in reference to the case while he was upon the said jury or before he was summoned or accepted as a juror in said cause.

F. A. MANGOLD.

Subscribed and sworn to before me this 28th day of March, A. D. 1898.

EDGAR HOWBERT, *Clerk*,
By F. F. SCHREIBER, *Deputy*.

Defendants then offered in evidence the affidavit of M. F. Bowers, and the same is in the words and figures following:

691 STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

JOSEPH H. BEALS, Plaintiff, }
vs.
J. J. CONE ET AL., Defendants. }

On this day personally appeared M. F. Bowers, who being first duly sworn according to law, deposes and says: That he is a resident of the town of Colorado Springs, county and State aforesaid, and that he was one of the bailiffs in attendance upon the sittings of this court at the time of the trial of the above-entitled cause, beginning on or about the 9th day of February last, and continuing for a period of about ten days; that during the trial of said cause the jury were kept together in charge of this affiant and of David Welch, who was also one of the bailiffs of the court; affiant says that on Thursday, the 17th day of February, 1898, and after the said case had been submitted to the jury for their verdict, he was present with the jury in the dining-room of the Alamo hotel at about seven o'clock p. m. where they had been taken for the purpose of getting their dinners; affiant says that although he was present in the dining-room, he was not at the table with the jurors, but was sitting a little distant in plain sight of them; that his attention was called to F. A. Mangold, one of the jurors, by some one, and he discovered that the said Mangold was suffering severely from an attack of sickness and faintness, of which the said Mangold complained to affiant; affiant seeing that the said Mangold was unable to remain in the dining-room at the table,

assisted him therefrom, and into the hall of the hotel, where
692 the other bailiff, David Welch, above named, was standing, and delivered the said Mangold into the charge of the said Welch, and then returned to the dining-room, the said Welch proceeding with the said Mangold into the room on the ground floor of the hotel opening on Tejon street, in which the jury had been sleeping during the progress of the trial. In a few minutes, to wit: not exceeding ten, affiant took the remainder of the jury who had by that time finished their dinner, from the dining-room and into the sleeping-room above described; that when he reached the sleeping-room he found the door on Tejon street locked, as was the custom of affiant and the said Welch to keep it, and on entering the room with the jury he found the said Mangold lying upon a bed in the presence and care of the said Welch, who was doing what he could to relieve the sickness; that affiant and the said Welch left the jury securely locked in the said room, until a little while thereafter when the said Mangold having recovered to some extent, the entire jury was taken in their charge to the jury-room in the court-house, where the said Mangold was seized with another attack of sickness.

That affiant started for Dr. Allen at the request of Mangold and returned with him in a few minutes, taking him into the jury-room, where, in the presence of affiant and of the entire jury, he examined said Mangold and prescribed for him.

That Dr. Allen then left in company with the bailiff Welch who returned bringing with him certain medicines, and remedies for the said Mangold; that the said Mangold was not again separated from the jury except that several hours later on the same evening affiant took the said Mangold from the said jury-room across the
693 hall to the water-closet upon the same floor a few steps distant; affiant says that when they reached the closet it was already occupied by some one, and that for about a minute or two he and the said Mangold waited in the hall until the closet should be vacant; that the said Mangold then entered the closet, affiant waiting at the door where Mangold remained for a few minutes, and was then taken by affiant back into the jury-room, and placed on a cot which had been provided for him therein; affiant says that while the said Mangold was absent from the jury-room as aforesaid, no one held any conversation with him on any subject except that some one, a man unknown to affiant, came up the stairs while he and the said Mangold were waiting in the hall, asked Mangold how he felt, to which the said Mangold replied that he was feeling better or words to that effect, whereupon the said person, without further conversation, passed on and into the court-room; affiant says that on the occasion referred to in the affidavit of J. W. Carr when it was said he came into the court-room with the juror Hull after the rest of the jury had entered and taken their seats, he had been attending to the wants of the jury before the opening of the court, taking them from the jury-room singly to the closet opposite, while the bailiff Welch was preparing the court-room for the incoming of the court; and while affiant was in charge of the juror Hull, who was in the water-closet, the said bailiff Welch entered the jury-

room and took the remaining jurors into the court-room where this affiant and the juror Hull followed within one or two minutes thereafter, and as soon as it was possible for the said Hull so to do; that upon this occasion the said Hull had no conversation with any one concerning the case, nor did any one attempt to approach him for any purpose whatsoever;

694 affiant says further that during all of the times when he was present and in charge of the said jury, not only throughout the trial of the case, but especially after the same had been admitted to them, that they were kept together or else only separated in charge of the bailiff in some such manner as herein detailed, and that no person or persons held any conversation with any of the jurors or attempted to approach any of them, nor held any conversation with any of them, relative to the case while they were absent from the court-room, and that affiant and the said Welch were at all times extremely careful to keep the jury well guarded under the instructions of the court, which was accordingly done; affiant says further that the said David Welch died in Colorado Springs on the 21st day of March, A. D. 1898, after an acute attack of pleuro-pneumonia, which lasted for about nine days prior thereto, and further affiant saith not.

M. F. BOWERS.

Subscribed and sworn to before me this 28th day of March, A. D. 1898.

EDGAR HOWBERT, *Clerk*,
By M. L. TAYLOR, *Deputy*.

Defendants then offered in evidence the affidavit of James J. Cone, and the same is the words and figures following:

695 STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

JOSEPH H. BEALS, Plaintiff,
vs.
J. J. CONE and LYMAN ROBISON, Defendants. } No. 4086.

STATE OF WISCONSIN, } ss:
County of Portage, }

On this day personally appeared James J. Cone, who being first duly sworn, according to law, deposes and says:

That he is one of the defendants in the above-entitled case; that on, to wit: the 21st day of March, 1898, he received by mail from his attorneys what purports to be a copy of a certain affidavit made by one W. J. Williams, and sworn to on the 21st day of February, 1898, and filed in support of motion for a new trial in the above-entitled cause in the said district court of El Paso county; that he has read the said affidavit, and fully understands the contents thereof.

Affiant says that the said Hawkins mentioned in the said affidavit did, at his own request, have a conversation with him some time during the fore part of the month of October, A. D. 1897, with reference to the Tecumseh-Ophir litigation, but he had no such conversation as that which the said Williams in his said affidavit has recounted, and did not at any time or at any place, directly or indirectly, ask the said Hawkins, or employ the said Hawkins, or state that he desired the said Hawkins or any other person or per-
696 sons whomsoever to undertake the fixing of any jury for him in the trial of this case, or any other case; on the contrary, affiant says that at or about the time mentioned the said Hawkins approached affiant in the town of Anaconda, county of El Paso and State of Colorado, who said to him in substance that he had been requested by said Williams as one of the owners and officers of the Ashmont Gold Mining Company, who were interested in the Whale location, and T. C. Early, Esq., attorney for the said company, to assist them and the Tecumseh people in securing a jury which would give a verdict for the Tecumseh claim; he also said in substance that he knew from statements made by those gentlemen that a large sum of money had been raised by the parties in interest, or some of them, against this affiant and his codefendant, to wit: the sum of about $1,000, and that the purpose of said fund was to manipulate and secure the empanelling and selection of a jury which would render a verdict for the Tecumseh and against the Ophir claim at the ensuing trial thereof, the said trial then being assigned as affiant now remembers, for the fourth day of December, A. D. 1897; that the said Hawkins then and there expressed a preference and desire to do something of the kind for rather than against affiant, inasmuch as he had been employed by affiant theretofore in the work of detecting and securing the punishment of ore thieves from the Doctor mine; that the said Hawkins requested affiant to regard the said disclosure as strictly and absolutely confidential, because the said disclosure was made to affiant on account of the friendship of the said Hawkins for him; that affiant promised to say nothing about it except to one of his counsel C. S. Thomas, Esq., but — told affiant that he would not under any circum-
697 stances have anything to do with such a scheme as that suggested by the said Hawkins; that he felt that he ought to prevail at the trial of the issues in the said cause upon the merits of the Ophir location as contrasted with that of the Tecumseh, and that unless he could prevail fairly and after a full and fair trial, he would prefer to lose the property, or words to that effect.

Affiant further says that he may have stated that he had heard that the Tecumseh people were resorting to ulterior means for the purpose of defeating the Ophir claim, but he did not say that he had heard that the juries could be fixed or bribed in El Paso county, nor did he say that he was acquainted with a good many of the men who were liable to be drawn on the panel; on the contrary, affiant knew absolutely nothing about who would be drawn on the panel, or who would not be; as a matter of fact, he was unacquainted with and does not remember ever to have seen any member of the

jury who tried said cause; that very shortly after the said interview with the said Hawkins, affiant saw his attorney, C. S. Thomas, in the Cripple Creek district, and recounted to him what the said Hawkins had said and what affiant had done, and the said Thomas fully approved affiant's course in the premises, and warned him under no circumstances to have anything to do with any such scheme, or schemes, as that proposed or suggested by the said Hawkins, which advice, although wholly unnecessary, was and has been strictly acted upon and followed by affiant and his codefendant with reference to the trial of said cause.

Affiant further says that he does not believe his superintendent Dahl ever said to Hawkins that he, Dahl, had advised this affiant that he could not win the Tecumseh case, and that affiant was bull-headed, and wanted to try it once more; on the contrary, the
698 said Dahl has always with this affiant believed that the said cause should be determined in favor of the Ophir upon a fair and impartial trial, and never, so far as the affiant knows, expressed himself in any other way.

Affiant further says that the said Hawkins never advised this affiant that his proposed scheme was too dangerous to undertake, but on the contrary made the suggestion and disclosure hereinabove set forth.

Affiant further says that he has not expended nor promised to expend, or expects to expend, any money, favor, property, or other valuable thing whatsoever in and about the preparation and trial of said cause except the legitimate costs of the court officials, the fees of witnesses and the fees of his attorneys.

Affiant further says that as the active member of the partnership of Cone & Robison, of their mining transactions he has had the active, practical charge of said cause, and assumed the burden of the defense throughout, and the said Robison has had nothing to do either with the employment of witnesses, the payment of costs or the payment of counsel, but that all sums expended in behalf of the defense of this cause, have been expended by this affiant and only for the purpose aforesaid.

JAMES J. CONE.

Subscribed and sworn to before me this 22nd day of March, A. D. 1898.

My commission expires June 20th, 1898.

W. B. BUCKINGHAM,
Notary Public.

Which said motion for a new trial was by the court denied in the words and figures following: To which ruling of the court, the plaintiff, by his counsel, then and there duly excepted.

699 STATE OF COLORADO, } ss:
County of El Paso, }

In the District Court.

JOSEPH H. BEALS }
vs. }
J. J. CONE ET AL. }

This matter comes before the court on a motion for a new trial, and rests, in part, upon the usual statutory grounds, and in part upon matters somewhat novel in this jurisdiction, viz. corruption on the part of the sheriff's office in the selection of the jury, joined with corruption on the part of the jury itself in arriving at their verdict.

In considering this motion, the court will take up the different grounds in the order of their presentation, relied upon by counsel for plaintiff.

(1.) The first ground is that the court erred in calling a special venire until the regular panel was exhausted. It has been the custom in this court to summon jurors at the beginning of the term sufficient in number to perform their duty in both divisions. The venire is made returnable into the first division, and thereupon they are apportioned between the two divisions. Such procedure was adopted at the present term, and the number of jurors serving in the civil division, where this trial occurred, was, I think, sixteen. The parties to this action calling for a jury of twelve, the panel in attendance was insufficient, and it became necessary for that reason to summon a special venire, which was done by the court without objection whatever on the part of plain-
700 tiff. The contention now raised is that it appearing that there were a greater number of jurors in attendance upon the court, regularly summoned, although in use and apportioned to the criminal division, they should have been called ere a special venire was ordered. It might be a sufficient answer to this allegation of error, that no objection was made at the time, for it is undoubtedly the law that unless any irregularity in the summoning of a jury is met by objection at the time, it is waived. I quote:

"A known or obvious irregularity in the process of empaneling must be objected to at the time it is committed; it will not do to make the objection for the first time on a motion for a new trial, or in arrest of judgment."

1 Thomp. on Trials, sec. 113 and cases cited.

This seems to be a reasonable and just rule, otherwise the complaining party is given the opportunity to accept the verdict of the jury, if for him, and if not, then to raise the objection at a later period. Holding the objection up his sleeve, to use if he is beaten, and making no objection whatever if the irregularity is for his benefit; but waiving that point, there is nothing to show that there were any jurors in the criminal division not necessary for the transaction of business there. It does not appear upon this motion

that the total number of jurors apportioned to the criminal division were not performing duty or considering cases at the time. I think under the jury act of 1891, sec. 4, that the court possesses the power whenever it is necessary to use additional jurors, to summon them ere the original panel is exhausted in anticipation of a deficiency, and this especially would be true if the jurors on the regular panel were called into the box ere those on the special venire; and
701 it appears from the testimony of C. R. Manning, deputy district clerk, that this was done in the case at bar. It is true that the names of some of the special venire preceded the names of some of the regular panel, but this could very easily occur in placing the names upon the list furnished counsel, and is no evidence that the regular panel were not first called, as was sworn to by the clerk.

In the case of Nesbit *v.* The People, 19 Colo., 464, the court says: "It is in the discretion of the court to cause talesmen to be summoned by drawing them from the certified list, or from the bystanders, or by open venire, as heretofore practiced; and such mode of summoning talesmen may be resorted to whenever the regular panel of jurors has become insufficient from any cause as well as when such panel becomes exhausted in selecting a jury for the trial of a particular cause. * * * No prejudice can result to any party by summoning talesmen in advance, provided they are not actually called into the box to the exclusion of the jurors composing the regular panel. It does not appear that any juror of the original panel was thus excluded in this case. It would be a most serious inconvenience if the court were obliged to resort to a drawing from the certified list in order to complete a jury for the trial of a particular cause, or to supply a deficiency in the regular panel; and the language of the statute does not require such construction."

Housh *v.* People, 50 Pac., 1036 on the same point.
U. S. *v.* Laugherty, 13 Blatch. (U. S.) 267.
State *v.* Allen, 47 Conn., 121.
Thomp. on Trials, sec. 20, 25, 26.

So this ground I do not regard as tenable.

702 (2.) The second objection substantially charges corruption on the part of the sheriff in the selection of the jury, and also that three of the jurors were connected with the sheriff's office, and therefore disqualified to act as jurors.

In regard to the corruption charged against the sheriff, or any members of his office, it is sufficient to say that there is not even the "shadow of a shade" of testimony supporting any such conclusion. It is a charge apparently based wholly in the imagination of counsel, and has no foundation in fact, as far as the court is able to discover, or the proof shows. I shall dismiss that feature without any further discussion.

It does appear that two men summoned on the special venire held complimentary commissions from the sheriff's office, as deputy sheriffs, and it also appears from the testimony of Mr. Cook, that they were not in any way connected with the sheriff's office, re-

ceived no remuneration from the office or any employment of a
description. Only one of those served on the panel that tried t
case, Mr. Mangold, Mr. Cree having been excused for cause.

As a matter of fact, there is nothing which disqualifies
officer who has formerly been connected with the sheriff's office
who might at the present time hold a commission, such as was
dicated here, from making an honest and capable juror.

There is nothing in such contention that either impugns him
a citizen, or in any manner militates against his qualities as a jur
and counsel have shown nothing except baseless statements a
suppositions of dishonesty and corruption on the part of the she
and those jurors selected. If anything appeared in the e
703 dence, or the court could find anything, even by inference
support the contention that either the sheriff in selecting t
panel, or those jurors, were guilty of any form of misconduct,
in any manner disqualified to act as jurors, the verdict wou
promptly be set aside upon this ground; but in the absence of su
proof or support, it should not be done. So much upon the mer
But upon this ground of the motion, as upon the one preceding
is sufficient to say that counsel has lost all rights to urge it here
error by reason of his failure to object at the proper time and i
proper manner. If there is anything in the facts above set fo
that disqualifies those men from service as jurors, it should ha
been discovered and objection made to their serving upon th
voir dire examination. The opportunity was present, and w
diligence counsel could undoubtedly have discovered this defect
defect it was. That it has been waived by such failure, I c
Thompson on Trials, sec. 116 and notes, and more particularly
showing that the principle is *res adjudicata* in Colorado, I c
the case of Turner *v.* Hahn, 1 Colo., 24, in which the court sa
" Parties have the right to interrogate persons who are called to
as jurors for the purpose of ascertaining their qualifications bef
they are sworn, and if this is not done, the right to challenge
waived."

Jones *v.* People, 2 Colo., 351.

704 (3.) The third ground alleged is that one Smith, a s
veyor, appointed to attend the jury during their view of t
premises, pointed out where the corner stake of the Tecumseh lo
would fall and this being a vital question in the case, it is alleg
that it was error. Upon this point it is sufficient to say that it w
brought to the attention of the court by counsel prior to argume
and the jury were instructed to disregard it entirely, as it was n
evidence in the case. Believing that this worked no injury to t
plaintiff, as the jury were given a full opportunity to examine t
ground and determine the matter in any event, themselves, fr
the evidence that had been presented in court, as to where the sta
would naturally fall, this point must be overruled.

(4.) As to the separation of the jury. The proof upon this po
is meagre, and considered the most strongly for the plaintiff's cont
tion, would not indicate in any way that he had been prejudic

thereby. It consists of two parts, first, that when the jury boarded the train after their view of the premises to return to Colorado Springs, that two of them set on one seat of the car opposite the other ten, and in the same seat with two gentlemen that they knew, and for a few moments, probably five minutes, played a game of cards with the two latter gentlemen. They were immediately cautioned by the bailiffs and desisted from playing, and in a few moments it was arranged so that all the jury sat together. It is not intimated that anything was said to the jurors, or that the citizens with whom they sat would have said anything one way or the other that might have been injurious to either side of this litigation.

705 The second instance was where Mr. Mangold, one of the jurors, was taken sick at two different times, once, I think, during the day, and once at night, when it was necessary that he should answer a call of nature, and he retired in charge of a bailiff for that purpose, and later, being very sick, was taken into a room which the jury occupied at the hotel where a physician attended him. It appears that at all times the juror retiring was in the charge of a bailiff, and was only separated from the others in any event long enough to answer the demands of decency. In such instance it is not error that a juror is temporarily separated from his fellows, ever after they have retired to consider of their verdict.

2 Thompson on Trials, sec. 2549 and cases cited.
State *v.* Johnson, 10 Lou., 921.
State *v.* Tucker, 10 Lou., 501.
Wright *v.* State, 35 Ark., 540.

In the case of Downer *v.* Baxter, 30 Vt., 467, it appears that where after the jury had been charged by the court and retired for consultation, and before they had agreed upon a verdict, they separated some little time to go to their dinners, without an order of court, and without being in charge of an officer, and the court held that this did not, *per se*, render the verdict of a jury a nullity, saying "It is true the statute declares that when the court committed the case to the consideration of the jury, such jury should be confined under the care of an officer appointed by the court and sworn for that purpose until they are agreed upon a verdict, or are discharged from giving a verdict by the court." This statute was held to be directory, and the court refused to set aside the verdict.

706 Again: "But even then, where the deliberations of a jury are protracted, or where from the hour of adjournment or other circumstances it seems necessary, it is believed to be within the discretion of the judge to allow them to separate for needed rest or refreshment before making up their verdict."

Thomp. on M. Jur., sec. 314.

It seems to be the rule generally adopted that the mere separation of a juror from his fellows, even after they have retired for deliberation, to answer a call of nature, or for any other necessary and proper purpose, will not of itself be sufficient grounds for setting aside the

verdict; it must appear further that there was a strong probability that the jury had been tampered with, or influenced in some manner to return a verdict which it is sought to be set aside.

Proff. Jury, sec. 395.
Dozenback *v.* Ramer, 13 Colo., 458.
May *v.* People, 8 Colo., 230, '1.
Jones *v.* People, 6 Colo., 452.
Elkins *v.* People, 5 Colo., 508.

(5.) Another objection urged is that M. F. Bowers, one of the bailiffs, was not sworn when he took charge of the jury. As it appears from the record that he was so sworn, it is not necessary to discuss this point further.

707 (6.) It has been alleged, and shown by this motion, that since the trial, Smith, one of the witnesses for the defendant, had been convicted of perjury in some swearing before the land office, and this is set forth as one of the grounds for a new trial. As the testimony of Smith, or his character, to my mind exercised no controlling influence upon the trial, I do not think this ground is tenable. In any event it must appear that this matter would be sufficient to change the result of the trial, if brought to the attention of the jury, which I cannot believe; therefore, this ground will be passed.

(7.) The next error alleged is the refusal of all the jurors to visit the different shafts and workings of the lodes in controversy herein. It seems that in one instance a portion of the jurors stayed on top, while a portion of their fellows descended. The rule has been adopted, in this jurisdiction at least, that the view of the jury is not to be considered distinctly as evidence, but rather as a criterion or guide by which they may the better analyze the evidence presented during the trial of the case. The extent to which a jury must go in the examination of the premises has not, so far as I am advised, been determined by judicial opinion, and probably cannot be; it must depend on circumstances. Our statute provides that "the guides shall point out to the jury such portions of the property as it is desirable that they should see," indicating that the extent or effectiveness of their examination is a matter resting wholly within their own cognizance and determination.

708 The evidence in this case discloses that on the property in controversy there are several shafts, and I think a fair intendment of the law is that the jurors, each for himself shall examine the situation and the physical characteristics of the property that he may the better be enabled to determine the credibility of the witnesses, the weight of the evidence and satisfy his own understanding as to any portion of the testimony that was obscure or contradictory. To illustrate, in the case at bar, some might desire light on the discovery shaft, and others on the staking of the claim, and still others on the amount of annual labor performed, and each would satisfy himself on these points which were not clear to him from the evidence. If this is substantially done, I think it is sufficient, and nothing ap-

pearing in the evidence or the proof to indicate the contrary, I do not believe that the mere refusal of a certain portion of the jurors to critically examine portions of the ground that some other juror, or jurors, wished to see, is an error that prejudiced the plaintiff in this case.

(8.) Instruction No. 18 is objected to as erroneous, and sufficient in itself to justify the court in granting a new trial. It will be conceded that this instruction was not a model, and had the court possessed more time, would have changed the phraseology. But the error, if it be erroneous, consists more in the grammatical construction than in stating an erroneous legal proposition.

The three instructions Nos. 17, 18 and 19 must be considered together, for they practically relate to the same subject, No. 17 stating the exact language of the statute as to when a witness post may be used, and Nos. 18 and 19 stating propositions based upon the facts proven.

709 The portion objected to is as follows: "Upon that point the court instructs you that unless you find from the evidence that the southwest corner of the Tecumseh claim fell upon precipitous ground and within the lines of the rails of the Florence & Cripple Creek railroad, or so near to one or the other of them that the erection thereof would be interfered with by the passage of trains and was for that reason impracticable, then you are instructed that it was the duty of the plaintiff to set his post at such corner."

The first portion of the instruction was based upon the proposition that the side of a railway cut was not such precipitous ground as the statute contemplated to render the placing of a stake impracticable, and that it must be also within the lines of the rails or so near to one or the other thereof that the erection of the same would be interfered with by the passage of trains, either at the time the stake was placed or after, to render the same impracticable, and unless this appeared it was the duty of the plaintiff to set his post at the regular corner. If the instruction had rested solely upon the first part—that it must fall both upon precipitous ground and within the lines of the rails of the Florence & Cripple Creek railroad, without being modified by the next sentence, to the effect that even if it was placed so near to one or the other that the running of trains would interfere with it, it would undoubtedly have been an erroneous instruction, or at any rate misleading. This being followed by the latter part of the instruction, which was undoubtedly correct, and also being taken in conjunction with the ones that preceded and followed it bearing upon the same subject, I do not believe that the instruction complained of worked any injustice

710 to the plaintiff, or exercised any controlling influence on the verdict arrived at.

Instruction No. 16 is objected to in that while it states a correct proposition of law, it is couched in the abstract, and is therefore objectionable. It was based upon what appeared to some extent in the proof, that the veins on Raven hill were mineralized for several feet either way from the crevice, and that a discovery shaft sunk not in the crevice, but a short distance either way would result in

finding mineral which would assay high and pay for extraction and shipment. While is true the instruction does not technically apply to the crevice veins of Cripple Creek, it was not wholly without basis upon the facts, and, of itself, in my opinion, was not such an error as would in any manner affect the issues or the verdict. In mining instructions, especially, it is absolutely necessary in many instances to give abstract propositions of law; for instance, the definition of a vein, of rock in place, etc., are instructions on abstract propositions of law, but it is essential and necessary that they should be given. But as this instruction in any event related to one of the minor features of the case, I can see nothing in that instruction to justify me in setting aside the verdict.

(9.) The last ground urged is that the evidence shows that the annual assessment-work on the defendants' claim for the year 1897 was not of the value of $100. It is not contended that this would inure to the advantage of the plaintiff, for it is not shown that he made a relocation after the failure of the defendant, if he did so fail, to perform his annual labor on his lode claim; and it is further undoubtedly the law that two things are necessary to
711 constitute a forfeiture, first, failure to do the annual assessment-work, and a relocation by some one else, otherwise the first locator can enter into and resume work at any time within five years, and, in the absence of such intervening rights, can hold his claim.

In relation to the assessment-work of 1897, one W. E. Skipworth testified as follows:

Q. Which one did you do the assessment-work on?
A. On the Ophir.
Q. Was that in the year 1897?
A. Yes sir, and part of it this year, it ended up.
Q. Do you mean 1897 or 1898?
A. Partly in both.
Q. Beginning at what time?
A. Beginning last December, and I think it ran over three days in this month, or three days in January; I finished it.
Q. Whereabouts was that work done?
A. In the south drift; I simply ran the south drift further ahead.
Q. How many feet did you run in?
A. I should judge about 7 or 8 feet.
Q. Is it blasting rock?
A. Yes sir.
Q. Did it involve the hoisting of the waste to the surface?
A. Yes sir; we did not hoist it; we hoisted what had been broke the year before.

And on cross-examination the witness testified that it was worth $12 per foot to run the drift.

In addition to this Mr. Cone testified as follows on this point:

"In 1897 I paid for labor in December $90, and for two days work of my shift boss at $4 a day, $8, besides the powder and fuse and steel and candles that were used in working the assessment;

and I also paid in January for three shifts of two men each, making $18 additional."

While it is true that Skipworth did not testify directly that this work was worth $100, he gave the facts and it was for the jury to determine whether it amounted to a full assessment for the year noted.

This, I think, covers substantially the reasons urged upon this motion, and as none of them to my mind are prejudicial to the plaintiff, sufficient at least to justify the setting aside of the verdict, the motion will be overruled and exceptions saved.

712 And thereupon, the court ordered judgment entered in favor of the defendants and against the plaintiff, in accordance with the verdict of the jury heretofore rendered herein; to which judgment of the court, the plaintiff, by his counsel, then and there duly excepted.

And now, forasmuch as the matters above set forth to not fully appear of record, the plaintiff tenders this, his bill of exceptions by him reserved herein, and prays that the same may be signed and sealed by the judge of this court, and made a part of the record herein, pursuant to the statute in such case made and provided; which is accordingly done on this 2nd day of June, A. D. 1898.

(Signed) IRA HARRIS, [SEAL.]
Judge of the District Court of the Fourth Judicial District of the State of Colorado.

Tendered to me this 17th day of May, 1898.

IRA HARRIS, *Judge.* [SEAL.]

O. K.
C. S. THOMAS.

5, 23, '98.

713 In the Supreme Court of the State of Colorado.

JOSEPH H. BEALS, Appellant,
vs.
JAMES J. CONE and Others, Appellees.

No. 3907. Assignment of Errors.

Now comes the appellant in the above-entitled cause, and for assignment of errors herein says that in the record and proceedings in said cause there is manifest error in this:

1. That the court erred in sustaining the defendants' demurrer to the second and third paragraphs of plaintiff's amended or additional replication filed May 27th, 1897. (Printed Abstract, page 5.)

2. That the court erred in making an order granting defendants a new trial as a matter of right under the statute, after having overruled a motion for a new trial for cause. (Printed Abstract, page 7.)

3. The court erred in excluding the decisions of the Secretary of the Interior, under which the entry to the Ophir lode was cancelled. (Printed Abstract page 45.)

4. The court erred in excluding Exhibit M (printed Abstract, page 46).

5. That the court erred in excluding Exhibit A, being the original location certificate of the Tecumseh lode (printed Abstract, page 47).

6. That the court erred in not allowing J. W. Carr, witness for plaintiff, to answer a question as follows: Q. If the post
714 fell outside of the level made by the ties on this embankment and fell on the slopes of that embankment, would you call that on precipitous ground? (Printed Abstract, page 51.)

7. That the court erred in not allowing the defendant James Cone to answer the following question: Q. How do you think you could do it legitimately? (Printed Abstract page 107.)

8. That the court erred in not allowing defendant James J. Cone to answer the following question: "Q. How do you think he could truthfully pretend that he had found such a vein as he describes in that affidavit in that 25-foot hole?" (Printed Abstract page 108.)

9. That the court erred in not allowing said James J. Cone to answer the following question: "Q. Why do you keep a man who will make that kind of affidavits in your employ, and put him forward in responsible positions where he can perpetrate other foul play?" (Printed Abstract page 108.)

10. That the court erred in admitting in evidence the location certificate of the Ophir lode marked Exhibit 2 (printed Abstract page 116.)

11. That the court erred in not allowing D. J. Bridge, witness for plaintiff, to answer the following question: "Q. You may state who did this." And the court further erred in excluding evidence offered in response to the said question. (Printed Abstract page 117.)

12. That the court erred in not allowing Edward Carr, witness for plaintiff, to answer the following question: "Q. You may state whether or not, in your judgment, you could contract to have that work done for that or would be willing to do it for that?"
715 (Printed Abstract page 119.)

13. That the court erred in not allowing J. W. Carr, witness for plaintiff, to answer the following question: "Q. Did you ever do any contracting for that kind of work at that rate?" (Printed Abstract page 122.)

14. That the court erred in not allowing J. W. Carr, witness for plaintiff, to answer the following question: "Q. About what difference do miners and contractors make between sinking and drifting?" (Printed Abstract page 122.)

15. That the court erred in not allowing Charles Harris, witness for plaintiff, to answer the following question: "Q. Is that correct?" (Printed Abstract page 124.)

16. That the court erred in not allowing W. C. Wyncoop, witness for plaintiff, to answer the following question: "Q. What are the veins in Cripple Creek generally?" And the court also erred in excluding the testimony offered in response to the last question. (Printed Abstract, page 127.)

17. That the court erred in not allowing the said W. C. Wyncoop

to answer the following question: "Q. Will you produce it?" And the court also erred in excluding the evidence offered in response to such question. (Printed Abstract pages 128–129.)

18. The court erred in refusing instructions numbered, one, six, seven, ten, eleven, twelve, and thirteen, asked by plaintiff and in refusing the second paragraph of instruction No. five (printed Abstract pages 134–135–137–138–140–141–142).

19. The court erred in giving instructions numbered one, two, three, four, five, six, seven, eight, nine, ten, thirteen, fourteen,
716 sixteen, seventeen, eighteen, twenty, twenty-one, twenty-two, twenty-four, twenty-five, twenty-six, and twenty-nine (printed Abstract pages 143 to 163).

20. The court erred in instructing the jury as follows: "The court further instructs you that the object of your visit to, and examination of, the premises in controversy is to enable you to see for yourselves, and to examine for yourselves, the physical situation, condition and surroundings of the premises. Hence, whatever you learn by such view and examination is available to enable you to determine the weight of the conflicting testimony of the witnesses respecting the matters upon which they have testified, and to enable you thereby the better to understand and comprehend the testimony of the witnesses respecting the issues involved herein, concerning said premises, and your verdict must be based upon the evidence before the court, thus the more intelligently applied by you from your view and examination of said premises." (Printed Abstract page 164.)

21. The court erred in instructing the jury as follows: "Counsel for defendants, gentlemen, requests that you be further charged in relation to the evidence upon which you are to decide the issues in this case. Upon that point, the court instructs you that the issues that have been submitted to you on this trial are to be determined wholly by the evidence adduced on this trial; and you are to consider in nowise any remarks of counsel in relation to the former trial of this case, or its result, nor to consider any evidence except such as has been presented herein, in arriving at your verdict." (Printed Abstract page 165.)

22. The court erred in not allowing F. A. Mangold, witness for plaintiff, on motion for a new trial to answer the following
717 question: "Q. How long have you held that commission?" (Printed Abstract page 168.)

23. The court erred in refusing to allow F. A. Mangold, witness for plaintiff, on motion for a new trial, to answer the following question: "Q. During the time that you were a deputy sheriff you attended court here a good deal did you not?" And the court erred in excluding the testimony offered in response to said question. (Printed Abstract pages 168–169.)

24. That the court erred in not allowing F. A. Mangold, witness for plaintiff on motion for a new trial to answer the following question: "Q. You may state whether or not Mr. Smith, a guide, appointed on the part of the defendant, pointed out a stake that he

had driven there to fix the true place of the southwest corner." (Printed Abstract page 170.)

25. That the court erred in not allowing the said witness Mangold, on motion for a new trial, to answer the following question: "Q. Did all of the jury go down and take a view of this property—go down the shafts?" (Printed Abstract page 170.)

26. That the court erred in not allowing said Mangold to answer the following question: "Q. You may state whether or not you were permitted to separate from the balance of the jury that evening" (being the evening that the jury was considering their verdict). And the court further erred in excluding the testimony offered in response to said question. (Printed Abstract page 171.)

27. That the court erred in not allowing the said Mangold to answer the following question: "Q. You may state whether or not the jury in this case stood upon the first ballot seven to four, one not voting, (for plaintiff,) and that they remained that way for
718 several ballots?" The court further erred in excluding the testimony offered in response to the said question. (Printed Abstract page 171.)

28. That the court erred in not allowing said Mangold to answer the following question: "Q. You may state whether or not you introduced into the jury-room the argument that as the defendants had had one new trial as a matter of right, and the plaintiff would have the right of a new trial the same as the defendants had, it would be only fair to find for the defendants and thereby put the parties on an equality." And the court further erred in excluding the evidence offered in response to that question. (Printed Abstract page 172.)

29. That the court erred in not allowing W. L. Cook, witness for plaintiff, on motion for a new trial, to answer the following question: "Q. Did any of the others of that special venire hold commissions as deputy sheriffs?" (Printed Abstract page 175.)

30. That the court erred in not allowing J. W. Carr, witness for plaintiff, on motion for a new trial, to answer the following question: "Q. Was that embankment what you would call on precipitous ground?" (Printed Abstract page 179.)

31. That the court erred in the ordering and issuing of the special venire herein. (Printed Abstract page 186.)

32. That the court erred in overruling the motion for a new trial herein. (Printed Abstract page 203.)

33. That the court erred in entering judgment for defendants.

Wherefore, plaintiff prays that such judgment may be reversed.

H. B. JOHNSON,
RALPH W. SMITH,
Attorneys for Appellant.

719 And thereafter and on to wit: the 6th day of February, A. D. 1900, the same being one of the days of the regular January A. D. 1900 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Appellant,
v.
JAMES J. CONE ET AL., Appellees.

Now comes H. B. Johnson, Esq., and Ralph W. Smith, Esq., attorneys for appellant, and Charles S. Thomas, Esq., attorney for appellees, also comes; and thereupon this cause is argued orally, and submitted to the consideration and judgment of the court.

720 JOSEPH H. BEALS, Appellant,
vs.
JAMES J. CONE ET AL., Appellees. } No. 3907.

Appeal from the district court of El Paso county.

Action by appellant, as plaintiff in the court below, as the owner of the Tecumseh lode, in support of his adverse — against the application of appellees, as defendants, for patent to that portion of the Ophir lode in conflict with the Tecumseh. From a judgment in favor of defendants, plaintiff appeals. The facts and other data necessary to an understanding of the questions involved and decided, will be found in the opinion, in connection with the discussion of the errors assigned by appellant.

Mr. Justice GABBERT delivered the opinion of the court:

By way of replication to the answer and counter-claim of appellees, appellant interposed (1) what purported to be a plea of *res judicata;* and (2) a plea of estoppel *in pais.*

By the first, it was averred, in effect, that on February 10, 1893, appellees entered the Ophir lode; that thereafter appellant and others filed a protest against such entry, by which it was alleged that no discovery of mineral thereon had been made; that a hearing on such protest was had, which resulted in a finding
721 by the Land Department of the General Government, that no discovery has been made on the Ophir; that the discovery shaft thereon was but 25 feet in depth, on the 11th day of October, '93; that the sinking of such shaft was the only work performed by appellees on the Ophir prior to that date, and that on these findings a judgment was entered, cancelling the entry.

By a second plea it was averred that the appellee, J. J. Cone, at the hearing above referred to, testified, in substance, that the discovery shaft on the Ophir was but 25 feet deep on the 11th day of October, '93; that no vein had been disclosed thereon at that time, and that no work had been performed on the claim in the year 1893; that by reason of such testimony, appellant and others interested with him were induced to expend a large sum of money in exploring for mineral in the ground in conflict, between the Tecumseh and Ophir lodes, and in working and developing the former; that appellees knew that such expenditure was being made on the faith of the truth of the above statements of appellee Cone, but never contradicted such statements; that if appellees performed any work on the Ophir, in the year 1893, prior to the 11th day of

October of that year, sunk the shaft to a greater depth than 25 feet, or discovered a vein in such shaft, appellant and those working under him were ignorant of such facts. To each of these pleas a general demurrer was interposed, and sustained. This ruling of the trial court is assigned as error.

It will be borne in mind that the application of appellees for patent to the ground in controversy adversed by appellant, is in no manner based upon the proceedings resulting in an entry
722 which was cancelled as above pleaded, nor do they in any manner base their rights to the ground in controversy by virtue of such application, or the entry thereunder which was afterwards annulled. The claim of counsel for appellant is, that the judgment of the Land Department is *res judicata* of the facts established in the proceeding instituted by appellant and others, protesting against such entry. In order to constitute a judgment in one action *res judicata* in another, it must appear that the quality of the parties to each is the same.

Slocum *v.* De Lizardi, 99 Am. Dec., 740;
A. T. & S. F. *v.* Comm., 12 Kan., 127;
Freeman on Judgments, § 252;
Bouvier's Law Dic., title *Res Judicata*;
Benz *v.* Hines, 3 Kan., 390;
Lower Latham D. Co. *v.* Louden I. C. Co., *ante* p. —.

The judgment rendered by the Land Department in the matter of the former entry of the land in controversy in no manner settled the rights of the parties to that proceeding to such lands. It merely held that appellees were not entitled to be vested with the fee therein from the General Government. The protestants were not parties in interest, because they made no claim to the subject-matter of the controversy, and with respect to that proceeding, occupied the position of *amici curiæ*, with the right of showing that appellees had not complied with the requirements of the law relative to obtaining title from the Government for mineral lands at the time of their former application.

Weeks' Mineral Lands, § 96;
In re Mt. Pleasant Mine, Copp's Mineral Lands, 204.

It is manifest, therefore, that the quality or capacity in
723 which appellant acted in the protest proceedings pleaded, is entirely different from the capacity in which he appears in the present action.

In order to sufficiently plead an estoppel *in pais* based upon statements, it must be averred, among other things, that the statement relied upon to constitute such estoppel was made with the intention that it should be acted upon.

Patterson *v.* Hitchcock, 3 Colo., 533;
People *v.* Brown, 67 Ill., 435;
Martin *v.* Zellerbach, 38 Cal., 300.

In the replication interposed by appellant on this subject, there is no averment that the statements attributed to the appellee Cone

were made by him with the intention of deceiving or misleading appellant, or those acting with him, nor is there any allegation that supplies the absence of a direct one to this effect. The demurrer to such plea in the replication was properly sustained.

Numerous errors are assigned on the rulings of the trial court with respect to the admissibility of evidence, some of which are new and important. On the trial, appellant offered in evidence the decisions of the Department of the Interior rendered in the matter of the protest against the former application of appellees for patent on the Ophir lode, together with a notice directed to them, that a hearing had been ordered upon such protest. Each of these was excluded. These decisions were rendered in the proceedings mentioned in the plea of *res judicata*, to which reference has already been made. The principal contention between the parties was, upon which of the conflicting lode claims was a
724 discovery of mineral first made? The department, in the protest proceedings, found from the evidence submitted, that no discovery of mineral had been made upon the Ophir on the 11th day of October, 1893. Counsel for appellant contend that these decisions were material evidence, because this finding was conclusive upon that question, and that appellees were precluded from showing a discovery on the Ophir prior to that date. A sufficient answer to this proposition should be, that as the judgment rendered in the protest proceedings was not *res judicata* between the parties to this action, that no fact found by the department in those proceedings would be competent to contradict or establish any fact directly in issue in this. A consideration of the nature of an application for patent to mineral lands which is rejected, and the result of the judgment of the Department of the Interior which merely holds that the applicant is not entitled to patent, and where the rights of others to the lands embraced in the application are not determined, will demonstrate that no finding of fact made by the department in such case is either conclusive or admissible in evidence in another action, in which the applicant bases no rights to the ground in controversy by virtue of such proceedings. Under the law regulating the issuance of patents to mineral land, and the rules of the department, certain facts must be established. If not, the application is dismissed. Such a judgment is, in effect, one of nonsuit, and therefore not one upon the merits.

Iles v. D. & R. G. R'y Co., 25 Colo., 19.

725 It is no more than a conclusion that in that particular application the applicant has failed to establish the necessary facts to entitle him to a patent the same as a judgment of nonsuit would be directed in an action at law, where the plaintiff had failed to establish the facts upon which he relied to entitle him to the judgment demanded. The fact that a protest had been filed does not change the rule, when, as in this case, the rights of the protestants were neither involved nor adjudicated. Many authorities are cited by counsel for appellant, in which it has been held that the findings of fact made by the Department of the Interior are con-

clusive upon the courts. In all these cases the question involved was the authority of the courts to redetermine questions of fact already determined by the department, where parties either based their right upon a muniment of title issued by the government, which had been annulled, or were attempting to show that the facts upon which a patent had been issued were different from those necessarily established before the department upon which it based its action. This is not the case at bar. Appellees are not asserting any rights to the premises in dispute by virtue of the cancelled receiver's receipt, by attempting to show that the findings of the department, that no discovery of mineral has been made upon the Ophir at the time of their former application, were not justified, but have instituted another proceeding to procure patent, which may be likened to a new action after having suffered judgment of nonsuit; and hence, the authorities cited are not in point.

726 Our attention has not been directed to any case where the question here involved has been directly decided, but we think the rulings of the Department of the Interior fully sustain our conclusion, that the cancellation of a mineral entry only is not *res judicata* on another application for patent, and that the facts found, upon which such action is based, are not admissible to support an adverse claim against a second application for the same premises. In Branagan *v.* Dulaney, 2 L. D., 744, Secretary Teller, in speaking of the rights of the locator of a mining claim, says:

"The Government gives the possessor of a lode his choice, to hold it without patent, or to take patent. If he attempts to take a patent, and finds that he is met with obstacles not anticipated, he may relinquish his attempt to secure patent, and continue to hold by right of possession. Thus, when the applicant to enter a lode claim is met with an adverse claim, he may, if he chooses so to do, avoid a legal conflict by dismissing his application for a patent, and rely on his title by possession given him by the local laws and customs, and a compliance therewith."

In the case of the Clipper Mining Company, reported in 22 L. D., 527, it appears that certain parties applied for a patent on a placer claim, against which a protest was filed, upon the theory that the land embraced in the application was not placer. This protest was sustained, the department finding, as a matter of fact, that the ground was not subject to location as a placer mining claim. Afterwards lode claims were located within the limits of the placer, upon which applications for patents were made. The owners of

727 the placer filed an adverse claim against the issuance of patent to the lode claims, in which they set up their old placer title; the applicants moved to dismiss, because a judgment had already been rendered by the Land Department, that the ground claimed as a placer could not be held as such, and the department refused to dismiss the adverse of the placer claimants, which was affirmed by the Secretary of the Interior. While the judgment of the latter seems to have been based largely upon the proposition that the adverse claim ousted the department of jurisdiction, the Secretary, in his opinion, said:

"It is contended by counsel for applicant that the judgment in the Searl placer was a complete and final adjudication; that the land embraced therein was not placer ground, and could not be entered as such; hence, the adverse claim filed by Searl *et al.*, based, as it is, upon land for which application for patent has been rejected, ought not to be accepted by the department as a legal or proper adverse claim, and its application should be received and patent issue, notwithstanding. * * * The judgment of the department in the Searl placer case went only to the extent of rejecting the application for patent; the department did not assume to declare the location of the placer void, as contended by counsel nor did the judgment affect the possessory rights of the contestant to it."

In the case of McGowan *et al. v.* The Alps Cons. M. Co., 23 L. D., 113, the Secretary of the Interior, in speaking of the effect of the cancellation of a mineral entry, said:

"The fact that the entry was cancelled would not, of it-
728 self, render the ground subject to relocation. The original location of the lode was not affected by the cancellation, even though it had been regular, and the owner could still hold it under its possessory right, so long as there was a compliance with the requirements of the law."

The fair inference from these rulings is, that the judgment of the department, rejecting an application for patent and nothing more, leaves the applicant with the same rights as though no application had ever been made.

The trial court excluded appellant's original certificate of location on the Tecumseh, which bore date May 3, 1892; was recorded May 6 of the same year, and claimed a discovery on April 18, preceding. The evidence was undisputed, that no discovery of mineral in place, such as the law contemplates, was made upon the Tecumseh until April 20, 1894, at which time appellant relocated the premises and filed a certificate of location. His counsel contend that the original location certificate should have been admitted, because a discovery having been made in the spring of '94, it would relate back to the date of the original location. The validity of the location of a mining claim is made to depend primarily upon the discovery of a vein or lode within its limits—§ 2320, R. S. U. S. Until such discovery, no rights are acquired by location. The other requisites which must be observed in order to perfect and keep alive a valid location, are not imperative, except as against the rights of third persons. If the necessary steps outside of discovery are not taken within the
time required by law, but are complied with before the rights
729 of third parties intervene, they relate back to the date of location, but not so with discovery; for it is upon that act that the very life of a mineral location depends, and from the time of such discovery only would the location be valid, provided, of course, that others had not previously acquired rights therein.

N. Noonday M. C. v. Orient M. C., 6 Sawyer, 299.

Under this rule, the original certificate of the Tecumseh was

properly excluded, for the rights of appellant to the disputed premises only dated from April 20, 1894.

Others errors assigned upon the admissibility of evidence are argued, but as they are manifestly untenable, they will not be noticed in detail.

Errors are assigned upon the instructions given by the court and also upon certain instructions requested by counsel for appellant, and refused. Those relating to the instructions given will be first considered. The correctness of the charge of the court, defining veins, is challenged. On this subject the jury was advised, in effect, that a vein is a continuous body of mineral-bearing rock, containing precious metals in appreciable quantities, with defined boundaries in the general mass of the mountain; that, theoretically, it must have two walls, but that it was not absolutely necessary that they be disclosed; that their presence would be strong evidence of the existence of a vein, but that the boundaries of the vein might be ascertained by tests, which would distinguish the rock or other substance carrying precious minerals from the rock enclosing it, which did not. The criticism of the foregoing is, that the definition of a vein as therein given
730 was not applicable to the facts, and authorized the boundaries of a vein to be established by assays alone. On behalf of appellant it is claimed there were three well-defined fissures of the Tecumseh disclosed in as many different shafts. It is conceded that on the Ophir a vein with defined boundaries was disclosed in the discovery shaft at a depth of about thirty-four feet. It was located prior to the Tecumseh. The important question upon which the rights of the parties hinged, was, upon which claim was the first discovery made? In determining this fact, it was important to ascertain whether the vein of the Ophir was first disclosed, near the bottom of the discovery shaft, or at a point about twenty feet from the surface. Witnesses for appellees had testified to the existence of the vein at this latter point, or to conditions which, if believed by the jury, from which its existence at this locality in the shaft might be inferred, although it appears that defined boundaries of the vein were not visible at this place. Many definitions of veins have been given, varying according to the facts under consideration. The term is not susceptible of an arbitrary definition applicable to every case. It must be controlled in a measure, at least, by the conditions of locality and deposit—Cheesman *v.* Shreve, 40 Fed., 787. The distinguishing feature between a vein and the formation enclosing it, may be visible; it must have boundaries, but it is not necessary that they be seen; their existence may be determined by assay and analysis—*ibid.*

Hyman *v.* Wheeler, 29 Fed., 347;

Iron Silver M. Co. *v.* Cheesman, 116 U. S., 529.

731 The controlling characteristic of a vein is a continuous body of mineral-bearing rock in place, in the general mass of the surrounding formation. If it possess these requisites, and carries mineral in appreciable quantities, it is a mineral-bearing

vein, within the meaning of the law, even though its boundaries may not have been ascertained. The instructions of the trial court recognized the different conditions which should be considered in establishing the existence of a vein applicable alike to the veins claimed to be disclosed upon the respective mining claims. On the property of appellant, it was asserted that the walls of the vein were visible; on that of appellees, the vein was claimed to have been discovered about twenty feet from the surface, although at that point neither wall was disclosed; so that, taking into consideration the conditions which the respective parties asserted, and upon which they relied to establish the existence of a vein upon the respective properties, the charge of the court on this subject was correct.

Appellant contends that certain instructions requested upon his behalf, which were to the effect that the discovery shaft upon a mining claim must show a well-defined crevice, should have been given. This contention is based upon the proposition that the vein of the discovery shaft must be plainly visible. From what we have already said, regarding the definition of "veins," and how their existence may be determined, it is clear that the instructions requested, which sought to inject into the case the theory that a vein could not be said to be discovered unless its boundaries were disclosed, were properly refused.

732 The southwest corner post of the Tecumseh was not placed where it fell by right, because, it was claimed, that point was impracticable. The evidence establishes that this corner fell upon a railroad embankment. It is claimed by counsel for appellant, that the court instructed the jury to the effect that unless it was found from the evidence that the true southwest corner of the Tecumseh fell upon precipitous ground, and within the rails of the railroad occupying such embankment, or so near to one or the other of them that the erection of a post at that point would be interfered with by the passage of trains, that it was the duty of appellant to set his post at the true corner.

The instruction referred to is not happily worded, but it must be read as a whole, and also in connection with the one immediately following, from which it is apparent that the court directed the jury that appellant was required to place the southwest corner post of the Tecumseh lode at its true point, unless the evidence established that such point fell where it was impracticable to maintain it. Aside from these considerations, appellant is not in a position to complain of this instruction. It does not appear that the erection of a stake at the true corner would have been interfered with by the passage of trains. The most that can be said is, that the true corner fell upon a railroad embankment twelve or fifteen feet in height. The statute provides that when one or more of the posts which must be erected for the purpose of marking the surface boundaries of a mining claim "fall by right upon precipitous ground, where the proper placing of it is impracticable, or

733 dangerous to life or limb, it shall be legal and valid to place any such post at the nearest practicable point, suitably marked, to designate the proper place." § 3153, 2 Mills. These

provisions concerning the placing of witness stakes cannot be invoked, when the setting of a stake at the true corner is merely difficult or inconvenient.

Crœsus Co. *v.* Colo. Co., 19 Fed., 78;
Taylor *v.* Parenteau, 23 Colo., 368.

It certainly was not dangerous to life or limb to set this post at its true point upon a railroad embankment, and it does not appear that to have done so was impracticable; so that if the instruction was susceptible of the construction claimed, it was correct, in that the post should have been erected at its true point, unless that point was in such proximity to the rails that it would be interfered with by the passage of trains. In this connection we notice another point, although we do not wish to be understood as definitely deciding it. The statute above quoted provides that where the conditions exist which authorize the placing of a boundary post at a place other than where, by right, it belongs, that it shall be "suitably marked to designate the proper place." This requirement is for the purpose of designating where the true point or corner is, which is evidenced by such post, and that it shall be so marked as to impart this information. In this case, it appears that the only marks upon the southwest corner post of the Tecumseh were "W. C. 4–9005." These marks certainly did not indicate by either course or distance where the true southwest corner of the claim would be found.

734 At the conclusion of the introduction of the evidence, the jury was directed to visit the premises in dispute. Objection is made to the instructions of the court to the jury on this subject, in that it was to the effect that the object of this view was to enable a better understanding and comprehension of the testimony of the witnesses respecting the issues involved, but that the verdict must be based upon the evidence introduced before the court. The contention of counsel for appellant is, that the information gained by the jury in visiting the premises should have been treated by that body as substantive evidence. It is well settled, by numerous decisions of this court, that although instructions need not be preserved by a bill of exceptions, yet, unless in an appropriate way an exception to an instruction is made in the court below, so that its attention is directed to the error of law complained of, this court will not review instructions which the trial court was given no opportunity to correct.

Keith *v.* Wells, 14 Colo., 321;
Edwards *v.* Smith, 16 Colo., 529;
Supreme Lodge K. of H. *v.* Davis, — Colo., —; 58 Pac., 595;
D. & R. G. R'y *v.* Ryan, 17 Colo., 98.

At the conclusion of the instructions given by the court of its own motion, which embraced the one under consideration, an exception in this form was preserved: "To the giving of which instructions, and to each and every thereof, the plaintiff by his counsel then and there duly excepted." This is equivalent to saving an exception to each instruction separately, but it cannot avail as against

any instruction to which it is directed, which contains a correct statement of the law, because it is insufficient to point out that which is incorrect from that which is correct.

Without attempting to state fully the instruction which
735 contains the direction of which appellant complains, it is sufficient to say, that it embraces other distinct statements of law, which are manifestly correct. Therefore, the exception noted was wholly insufficient to present the question for review, which it is not sought to have us pass upon and determine.

Other objections are urged to the instructions given, which, from the views expressed, we are of the opinion, are not well taken, and we do not deem it necessary to notice them at length. Some of the instructions requested by appellant, and refused, it is apparent from what we have already said, were not correct statements of the law; and as to the remainder, they were embodied in those given.

The remaining questions presented by counsel for appellant were raised upon a motion for a new trial, and may be considered under the following heads:

Irregularity in summoning talesmen;
Misconduct of officers in summoning these talesmen;
Misconduct of guide selected by appellees;
Misconduct of jury;
Failure of jury to properly view the premises in dispute;
Insufficiency of evidence to support verdict;
Newly discovered evidence.

The district court of El Paso county is conducted under two divisions, in one of which civil causes are tried, and in the other, criminal. It is the custom to assign certain jurors of the regular panel to each division. When this cause was called for trial, appellees demanded a jury of twelve. The number of jurors in attendance on the division in which the case was pending
736 not being sufficient from which to select that number, the court, instead of calling jurors from the criminal division, directed a certain number to be summoned by open venire. From the persons thus summoned, and those of the regular panel in attendance on the division in which this cause was tried, the jury was selected. After verdict, objection to the action of the court in summoning talesmen was made for the first time, when it was sought to show that the jurors in attendance on the criminal division were not employed or needed when the jury in this case was empaneled. Appellant is not in a position to raise any question regarding the action of the court in directing the issuance of an open venire. The exercise of reasonable diligence upon his part would have disclosed the apportionment of the jurors between the two divisions of the court, and if the conditions were such that he could have properly insisted on having jurors called from the division engaged in the trial of criminal causes, who were then not actually upon any jury, before talesmen could be placed in the box, it was his duty to call the attention of the court to this fact. Having failed to do so, any error in this respect is waived. It is not necessary, however, to place the decision of this question upon this ground

alone. The apportionment of the regular panel between the two divisions of the court was entirely in the control of the judges; their action in this respect cannot be interfered with; they make the apportionment in view of the expected need of jurors in the different divisions; if it turns out that they were mistaken
737 in their action, it will not be inquired into for the purpose of ascertaining whether a proper apportionment was made or not. It was evident that a jury of twelve could not be selected from the regular panel attending the division in which this cause was tried; the judge directed an open venire for a sufficient number for this purpose. This, in the exercise of his discretion as to how and when talesmen may be summoned, he had the clear right to do.

§ 2609, 3 Mills;

Laws '91, § 4, p., 250.

It is claimed that the sheriff packed the jury in this case, in the interest of appellees. This charge is based, substantially, upon these facts: It appears that the sheriff, or his office, received notice that a special venire for jurors would be issued; from what source this information was obtained is not disclosed; that persons, part of whom held commissions as deputies, were requested by the sheriff or his official employés, to be at the sheriff's office on the morning the venire issued, but prior to its issuance, who were afterwards summoned as talesmen, and called into the jury-box. One of these deputies, not selected as a juror, was afterwards detailed as the bailiff, specially in charge of the jury in this case. There is not a word of evidence that the sheriff or any one connected with his office, or that either of the persons summoned as talesmen, was biased against the appellant, or took any steps, directly or indirectly, to influence the jurors selected to try this cause. In our opinion, there is not the slightest reason to impugn the integrity of the sheriff, or those acting under him, in this matter.

738 While the jury was engaged in viewing the disputed premises, the guide selected by the appellees pointed out to the jurors the place where, he claimed, the southwest corner stake of the Tecumseh would fall, by right. It seems that he had previously made a survey of the premises. This action on the part of the guide was wrong, and directly contrary to the instructions of the court; but the attention of the court was called to this matter previous to argument, whereupon the jury was directed to disregard what was said by the guide regarding the proper place for this stake, and told that upon this point, nothing could be considered except the evidence introduced in the court-room, and upon the trial. This declaration of the trial judge was right, clear and emphatic, and we cannot assume that men who had taken a solemn oath to obey the instructions of the court would disregard this plain, authoritative statement regarding their duty.

The misconduct of the jury is based upon the fact that one of the jurors, after the cause was submitted, was separated from his fellows. An affidavit of this juror and the bailiff fully explains the reason of one separation, but it is insisted that this is not the

one established by affidavits filed in support of this ground of the motion for a new trial. According to one of these affidavits, the juror was in a room by himself, and during that period some unknown person was standing in the door of this room, who, upon seeing the affiant, turned and walked away. Mu*st* stress is laid upon the fact that during these separations, the juror was
739 seen alone in company with the bailiff, who had originally been summoned as a talesman. The mere separation of a jury, after the submission of the cause, is not *per se* sufficient for setting aside the verdict and granting a new trial. It must appear that by reason of such separation, there is a strong probability that the jury has been tampered with, or improperly influenced to return the verdict which is sought to be set aside.

Dozenback *v.* Raymer, 13 Colo., 451.

There is nothing in the facts established by the affidavits that the jury or any member had been tampered with, or that any effort was made in this direction. Citizens who are required to render services in the determination of disputes between litigants should not be charged with a disregard of their duty or their oath, nor will the courts assume that they have been guilty of such conduct, unless the facts upon which such a charge is based warrant that conclusion.

The fact- upon which counsel for appellant rely in support of the claim that the jurors did not properly view the premises are to the effect that all of the jurors did not go down the Tecumseh discovery shaft; that one of the bailiffs stated to the jurors that those who did not care to go down the shafts of either the Ophir or Tecumseh need not do so; that two of the jurors did not view or examine either shaft, and that only one went down the shaft of the Ophir. In suits involving the title to the right of possession of a mining claim it is made the duty of the court, upon the application of either party, to send the jury in a body to view and inspect the premises in dispute. Each party may select
740 a guide, to be approved by the court, who shall be authorized to point out such features as it is desirable that the jury should see—§ 188*a*, Mills' Code. In the case at bar, the jurors were not directed to examine any particular portion or feature of either claim. According to the directions of the court on this subject, that was left to their discretion. We are not prepared to say that a litigant in a mining suit may not have the right to have the jury specially directed regarding the examination, but no such request was made by appellant in this case; and therefore, while it may have been proper that the jurors should each have examined the shafts upon the respective properties, the appellant having failed to request the court to so direct, is not in a position to complain, because the jury in the exercise of its discretion, only examined such features as, in its judgment, after having heard the testimony, were desirable for the purpose of aiding a better understanding and application of the evidence.

It is also urged that the evidence is insufficient to support the

verdict, because as to some of the issues there was no evidence to sustain them; and as to others, it was false and fabricated. We shall not attempt to give an abstract of the evidence upon which the jury determined the questions of fact involved in this case. It is sufficient to say that there is evidence tending to prove every material issue tendered by the appellees. Whether some or all of this evidence was false, was a matter purely within the province of the jury; the witnesses were present in court; their alleged inconsistent statements was a matter for the jury to consider in
741 passing upen their credibility.

In this condition of the record we cannot disturb the findings of the jury.

The newly discovered evidence upon which appellant bases his right to a new trial, was evidence, so it is claimed, which would have impeached the credibility of one of the important witnesses of the appellees. It does not appear that if this witness had been impeached, it would have changed the result. There were other witnesses testifying to the same matters he did. Newly discovered evidence which only goes to impeach the credit or character of a witness, is not sufficient ground for a new trial, except it is clear that such impeachment would have resulted in a different verdict. Christ *v.* People, 3 Colo., 394.

The judgment of the district court is affirmed.

Affirmed.

Endorsed: Filed in supreme court Nov. 19 1900. Horace G. Clark, clerk.

742 And thereafter and on to wit: the 4th day of June, A. D. 1900, the same being one of the days of the regular April A. D. 1900 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Appellant,
v.
JAMES J. CONE ET AL., Appellees.

At this day this cause coming on to be heard, as well upon the transcript of proceedings and judgment had in said district court in and for the county of El Paso, as also upon the matters assigned for error herein; and the same having been heretofore argued by counsel and submitted to the consideration and judgment of the court, and it appearing to the court that there is no error in the proceedings and judgment aforesaid of said district court. It is therefore

Considered and adjudged by the court that the judgment aforesaid of said district court be, and the same is hereby affirmed, and stand in full force and effect; and that this cause be remanded to said district court for such other and further proceedings, according to law, as shall be necessary to the final execution of the judgment of said district court in the cause, notwithstanding the said appeal.

It is further considered and adjudged by the court that said ap-

pellees do have and recover from said appellant their costs in this behalf expended, to be taxed, and that they have execution therefor. And let the opinion of the court filed herein be recorded.

743 In the Supreme Court of the State of Colorado.

JOSEPH H. BEALS, Appellant,
v.
JAMES J. CONE ET AL., Appellees. } Petition for Rehearing.

Now comes the appellant in the above-entitled cause, and petitions the court to grant him a rehearing therein, for the following reasons:

First. The court erred in holding that the decisions of the Secretary of the Interior were neither binding upon the courts nor admissible in evidence for any purpose.

Second. The court erred in holding that the plea of estoppel *in pais* was insufficient.

Third. The court erred in holding that a well-defined crevice within the meaning of the statute is something that is discoverable only by assays.

Fourth. The court erred in holding that our original certificate of location was not admissible in evidence.

Fifth. The court erred in holding that instructions 18 and 19 were not erroneous.

Sixth. The court erred in sustaining instruction No. 21 given by the court and in holding that there was no error in refusing instruction No. 1 asked by appellant and refused by the court.

Seventh. The court erred in holding that there is legal presumption that annual labor is performed.

744 Eighth. The court erred in holding that there is any legal evidence that annual labor was performed by appellees for the year 1897.

Ninth. The court erred in the construction of our civil code, section 188*a* and in the instructions given to the jury in regard to their view of the premises and in holding that there was no error committed by the separation of the jury and refusal by a part of them to view the premises.

Tenth. The court errred in holding that appellant waived the right to complain of the issuance of the special venire.

Eleventh. The court erred in holding that the court below had entire control of the apportionment of the regular panel and could do so in such a way as to deprive every litigant in the civil division of a trial by twelve men, unless a special venire was employed; also in holding that the special venire was not used to pack the jury.

Twelfth The court erred in sustaining the rule which denied the right to prove that one of the jurors testified falsely on his *voir dire* examination in order to be kept on the jury.

H. B. JOHNSON,
Attorney for Appellant.

Endorsed: No. 3907. In the supreme court of the State of Colorado. Joseph H. Beals, appellant, *v.* James J. Cone, *et al.*, appellees. Petition for rehearing. Filed in supreme court Jun- 13 1900. Horace G. Clark, clerk.

745 And thereafter and on to wit: the 19th day of November, A. D. 1900, the same being one of the days of the regular September A. D. 1900 term of said court, the following proceedings, *inter alia*, were had and done, to wit:

JOSEPH H. BEALS, Appellant,
v.
JAMES J. CONE ET AL., Appellees.

At this day upon consideration thereof, it is ordered by the court that the petition of appellant for rehearing herein be, and is hereby denied.

746 No. 3907.

On petition for rehearing.

Per curiam:

The conclusion announced, that the plea of *res judicata* interposed by appellant was insufficient, and that the judgment pronounced by the Land Department in the protest proceedings therein referred to was not competent evidence, in no manner conflicts with the decision in German Insurance Co. *v.* Hayden, 21 Colo., 127. In that case the right of the appellees to recover depended upon the fact that the insured was vested with the title in fee to the land upon which improvements destroyed by fire were situate. At the time the contract of insurance was entered into the assured had obtained a receiver's receipt for these premises. Subsequently, and prior to the loss, this receipt was cancelled, and it was held that this action of the department was conclusive, that the character of title which the insured exacted should be vested in the insured, did not exist. In the case at bar the appellees, when their entry was cancelled, fell back upon the possessory rights initiated by the steps which they alleged had been taken in locating the premises in dispute. This they had a clear right to do, and therefore, in establishing the facts regarding these steps, they were not impeaching the judgment cancelling the receiver's receipt.

Another important element necessary to constitute an estoppel *in pais* is, that the party to whom the statement was made which
747 it is sought to make the basis of an estoppel, was ignorant of the truth of the facts to which such statement relates.

Patterson *v.* Hitchcock, *supra*.

It does not appear from the plea interposed as an estoppel *in pais*, that appellant was ignorant on the subject of the existence or non-existence of a vein in the Ophir shaft. The plea in question contains no direct averment upon this point, or any from which the inference could be fairly and reasonably deduced, that appellant

had no knowledge as to what was or was not disclosed in the Ophir shaft, in the way of a vein. For this reason, it does not appear that he has been misled by the statements attributed to appellee Cone. For the same reason, it does not appear that the silence of Cone misled him to his injury.

For a better understanding of the reasons why the ruling of the trial court, in excluding appellant's original certificate of location on the Tecumseh, was correct, the following facts should be borne in mind: The location of the Tecumseh under the discovery alleged to have been made April 20, 1894, was upon a discovery at an entirely different point from the discovery shaft upon which the original location was based. Under the new location a new discovery shaft was adopted. It became, in effect, an original location. The statute which permits amendatory or additional certificates to be filed provides that the filing of such a certificate shall not preclude the claimant under it from proving such title as he may have held under the original location
748 certificate. (§ 3160 Mills.) For this reason the original certificate may, under certain conditions, be admissible. Such conditions, however, do not exist in the case at bar. Prior to the discovery alleged to have been made upon which the second location is based, no right to the premises in dispute was vested in appellant, which entitled him to hold the ground as against third parties, because no discovery of mineral had been made before that time. A location without a discovery carries with it no rights—Upton *v.* Larkin, 6 Pac., 66. The acts to establish a location which appellant had performed prior to the discovery in April, 1894, would have taken effect, in so far as they could have been utilized, as of the date of such discovery. Erwin *v.* Perego, 93 Fed., 608. Appellant, however, did not rely upon any of these acts, but filed a new location certificate, including ground the boundaries of which were different from that described in the original certificate. This was a new location under a new and distinct discovery, and the act of filing a new certificate under this state of facts was a complete abandonment of all rights which might have attached to the steps taken under the original location. The appellees at all times relied upon a discovery claimed to have been made in the discovery shaft of the Ophir. Even if there was no mineral disclosed in this shaft at the time they filed their location certificate, the subsequent discovery which they claimed to have made in this shaft made this location valid, except as against intervening rights, from that date. Erwin *v.* Perego, *supra*. They never filed any other certificate and
749 the original certificate of the Ophir was, therefore, properly admitted.

On the trial below appellees offered in evidence samples of rock purporting to come from the discovery shaft of the Tecumseh, which they claimed did not contain mineral. In rebuttal, appellant produced a sample claimed to have been taken from a crevice in this shaft. This evidence was excluded on the ground that it was not rebuttal. "Rebutting evidence is defined to be that which is given to explain, repel, counteract or disprove facts given in evi-

dence by the adverse party. It is a general rule that anything may be given as rebutting evidence which is a direct reply to that produced on the other side." 19 A. & E. Enc. Law, 1093. Appellant had offered evidence-in-chief tending to prove the existence of mineral in the discovery shaft of the Tecumseh. To meet this evidence appellees had introduced samples from this shaft. As against this evidence, the offer of appellant was not rebuttal. It was nothing more or less than evidence which would have tended to prove the existence of a vein in the Tecumseh shaft, and would properly have been admissible in chief, but was in no sense rebuttal, for it did not tend to explain, repel, or disprove that the samples received in evidence on behalf of appellees were, in fact, mineral-bearing, or did not come from the Tecumseh.

In instructing the jury on the subject of marking the surface boundaries of a lode claim, the court in instruction No. 17, *inter alia* stated: "Where in marking the surface boundaries of
750 a claim, any one or more of such posts shall fall by right upon precipitous ground, where the proper placing of it is impracticable or dangerous to life or limb, it shall be legal and valid to place any such post at the nearest practicable point, suitably marked, to designate the proper place."

Immediately following this instruction, and upon this subject, the court further stated:

"18. Upon that point the court instructs you that unless you find from the evidence, that the southwest corner of the Tecumseh claim fell upon precipitous ground, and within the lines of the rails of the Florence & Cripple Creek railroad, or so near to one or the other of them, that the erection thereof would be interfered with by the passage of trains, and was, for that reason, impracticable, then you are instructed that it was the duty of the plaintiff to set his post at such corner. If, upon the other hand, you should believe that the proper place of such stake was within the lines of the rails of said road, then you are instructed that under the statute such witness corner shall be set at the nearest practicable point. Whether this was done, you are to determine, from the evidence in the case, and unless you should believe, in that event, that the said witness corner was set substantially at the nearest practicable point, the marking of said claim would be invalid.

"19. In this connection the court instructs you that if you believe
751 from the evidence that the southwest corner of the Tecumseh lode fell by right on the road-bed of the Florence & Cripple Creek railroad, and that such point was precipitous ground, where the proper placing of such corner was impracticable, and that plaintiff placed such corner stone at the nearest practicable point, suitably marked to designate the proper place, then such corner was sufficient and valid."

It will be observed that these instructions follow each other; that 18 refers to the part of 17 above quoted, and that in 19 what is there stated on the subject is preceded by the statement "in this connection," so that while the instructions are numbered, they are so intimately connected and refer one to the other, that the jury must have

understood that they were to be read as a whole. When so read, the thought expressed by the trial court is to the effect that appellant was not excused from placing the southwest corner post of the Tecumseh lode at its true point, unless it appeared from the evidence that such point fell where it was impracticable to maintain it.

Counsel for appellant contend that under instructions given and refused, the jury was precluded from considering the admitted fact, that veins were exposed in two different shafts upon the Tecumseh, designated 2 and 3. What we said in the original main opinion on this subject is withdrawn. In considering this question, these facts must be borne in mind: Whether or not a mineral-bearing vein was disclosed in the discovery shaft upon which the present location of the Tecumseh is based, was controverted. No location was made upon either of the discoveries in shafts 2 and 3. The proposi-
752 tion of counsel for appellant is, that if a well-defined crevice, although not bearing mineral in appreciable quantities, is exposed in the discovery shaft, the claimant may rely upon discoveries in other shafts within the boundaries of his claim, which disclose the mineral necessary to constitute technical veins.

No question is raised regarding the validity of our statute relative to the location of mining claims. In order that there may be no mistake as to the position of counsel on this subject, we quote from their original brief, as follows:

* * * "If the discovery shaft contains a well-defined crevice, thus giving all the appearance of a discovery, the claimant may rely upon other shafts within the boundaries of the claim for his discovery of the mineral necessary to constitute technical veins. The State statute does not provide what the well-defined crevice shall contain, while the act of Congress makes no provision as to what shaft the vein required shall be in. Reading and applying the two statutes together, we submit that the well-defined crevice must be in the discovery shaft, and the mineral-bearing vein may be found in some other shaft upon the claim."

And also from their reply brief, in support of their petition for a rehearing, the following:

"We come now to the question as to whether the entire right to a claim, in so far as the same depends upon a discovery of a well-defined crevice (as required by the State statute) and the discovery of a vein (as required by the act of Congress) is wholly dependent upon the discovery shaft." * * *

753 "We have not questioned the validity of our State statute. It is not necessarily, when properly construed, in conflict with the act of Congress. Both the State statute and the act of Congress can be given effect, and they should be so construed as to accomplish this." * * *

"We have not maintained that a discovery shaft can be altogether dispensed with. Neither have we maintained that when the State statute in regard to such crevice has not been literally complied with, we can go outside of the discovery shaft for the technical lode or vein, the discovery of which, within the limits of the claim, is required by the act of Congress."

The statute of this State, which designates what shall be disclosed in the discovery shaft, provides that it shall disclose a well-defined crevice at the depth of at least ten feet from the lowest part of the rim of such shaft, at the surface—§ 3152 Mills. It being conceded that the laws of this State relative to the requirements of a discovery shaft are valid, it appears to us that the proposition upon which counsel rely is not tenable. If, as stated, the State statute is legal, it necessarily follows that the discovery shaft must expose the vein upon which the location is based, or at least disclose one, and therefore the mere discovery of some other vein within the limits of the claim cannot supply the absence of the one required to be exposed in the discovery shaft. In other words—the proposition of counsel for appellant cannot be upheld, unless the State statute is declared invalid, and the admission upon their part that
754 it is not, relieves us from the necessity of determining the effect of discoveries in shafts 2 and 3 of the Tecumseh.

"Crevice," as employed in the statute relative to a discovery shaft, clearly means a mineral-bearing vein. It was so held by this court in Bryan *v.* McCaig, 10 Colo., 309. The circuit court of the United States for the district of Colorado has adopted the same view.

Van Zandt *v.* Argentine Co., 8 Fed., 725;
Terrible Co. *v.* Argentine Co., 89 Fed., 583;
Cheesman *v.* Shreeve, 40 Fed., 787.

Under these decisions, coupled with the admitted legality of the State statute, the fact that discoveries were made in shafts 2 and 3 upon which no locations were made, does not in any manner affect the validity of the Tecumseh.

It is asserted that the evidence is insufficient to establish the fact that the assessment for the year 1897 was performed on the Ophir. A witness on the part of appellees testified that he had extended a drift on the Ophir, on account of the assessment-work for 1897, a distance of seven or eight feet; that this drift was worth twelve dollars per foot. For this labor appellee appears to have paid the sum of ninety dollars. For additional work he paid for two days' work at the rate of four dollars per day, and later, for further work, eighteen dollars. This, in addition to paying for the powder, fuse, steel and candles that were used in working the assessment. There
755 may have been some evidence to the effect that the work was not worth the amount paid, but this was a question for the jury to determine, and as it has been determined in favor of appellees, upon evidence sufficient to sustain it, the finding on this subject will not be disturbed.

On the subject of annual labor, the court, by instruction No. 24 directed the jury as follows: "Upon this point the court further instructs you that the law does not presume a forfeiture by the failure to perform annual labor, and the plaintiff claiming that the Ophir lode became forfeited for such reason, the burden of proving that the annual labor was not done thereon, is on the plaintiff, and unless he has shown you, by a fair preponderance of the evidence, that

the work was not done, you are to determine that question in favor of the defendants."

The objection urged to this instruction is, that it cast a burden upon the appellant which he was not required to assume.

The evidence tended to establish that a valid location of the premises in dispute had been made by appellees. This location was prior to the only one under which appellant can base any claim. The act of Congress—§ 2324 Rev. Stat. U. S.—provides that a failure to perform the necessary annual work shall render a claim open to relocation, provided the original locators have not resumed work upon the claim after failure and before relocation. The fair construction of this provision is, that as between the locator and the General Government, the failure to do the annual assessment-work
756 does not result in a forfeiture. In other words—it is not necessary to perform the annual labor except to protect the rights of the locator against parties seeking to initiate title to the same premises. As against such subsequent location, a *prima facie* case is made on the part of the original locator by showing a valid location.

Hammer *v.* Garfield M. Co., 130 U. S., 291.

To otherwise express our views, it might be said, that after a valid location, the title thus acquired remains so, whether the annual assessment-work is performed or not, until forfeited or abandoned.

Renshaw *v.* Switzer, 15 Mining Reporter, 345;
6 Mon., 464;
13 Pac., 127.

It is the location by the new claimant, and not the mere lapse of time which determines the right of the original locator.

Little Gunnell G. M. Co. *v.* Kimber, 1 Morrison's Mining Reports, 536.

So that a party seeking to initiate a claim to mining premises already legally located must prove that the annual labor thereon has not been performed, in order to establish that the ground so located is subject to location. In so far, then, as the rights of appellant depended upon the failure of appellees to perform the assessment-work for 1897, it was encumbent upon him to establish this fact by a fair preponderance of the evidence, or, as the court stated, the burden of proof was upon him to show that the work for 1897 was not, in fact, performed.

Hall *v.* Kearny, 18 Colo., 505;
757 Johnson *v.* Young, *ibid.*, 625;
Hammer *v.* Garfield M. Co., *supra.*

The petition for rehearing is denied.
Petition denied.

758 I, Horace G. Clark, clerk of the supreme court of the State of Colorado, do hereby certify that the foregoing is a true copy of an original transcript of record, bill of exceptions, assignment of errors, opinions of this court, and all orders of court entered herein in the above-entitled cause, and now remaining of record in my office.

Witness my hand and the seal of the court, affixed at my office, in the city of Denver, this 17th day of January, A. D. 1901.

Seal Supreme Court, State of Colorado.

HORACE G. CLARK,
Clerk of the Supreme Court of the State of Colorado.

759 [Endorsed:] No. —. In supreme court, State of Colorado. —— —— *vs.* —— ——. Transcript of record, bill of exceptions and assignment of errors. Filed in supreme court this — day of ——, 18—.

——, *Clerk.*

760 In the Supreme Court of the United States.

JOSEPH H. BEALS, Plaintiff in Error,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants in Error.
} Petition for Writ of Error.

And now comes the above-entitled plaintiff in error, and says that there is manifest error in the record and proceedings herein, of which this court has jurisdiction, as shown by an assignment of errors filed herein; a duly certified copy of the entire record, and a brief herewith presented, and prays that a writ of error be allowed, commanding the said supreme court of the State of Colorado to send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States; and the said plaintiff in error further prays that an order be entered that said writ of error shall operate as a supersedeas.

H. B. JOHNSON,
Attorney for Plaintiff in Error.

761 In the Supreme Court of the United States.

JOSEPH H. BEALS, Plaintiff in Error,
vs.
JAMES J. CONE and LYMAN ROBISON, Defendants in Error.
} Assignment of Errors.

And now comes the above-named plaintiff in error and says that there is manifest error in the records, proceedings and judgment aforesaid, to wit:

1. The supreme court of the State of Colorado erred in affirming the ruling, order and judgment of the court below sustaining the demurrer of the defendants below to the second paragraph of plain-

tiff's replication to defendants' answer, and counter-claim, which said paragraph was as follows:

And for further replication plaintiff alleges that defendant on February 10, 1893, made a mineral entry which included said Ophir lode; that subsequently this plaintiff, with others, filed a protest against that portion of the entry which related to said Ophir lode; that said protest alleged, among other things, that there had been no discovery of any vein, lode, ledge or deposit of mineral on said Ophir lode; that the Commissioner of the General Land Office directed the register and receiver of the local land office at Pueblo, Colorado, to order a hearing of said protest, which was done, and which hearing took place on October 11, 1893; that at such hearing defendants appeared in person and by counsel, and defendant Cone testified thereon; that the testimony taken at such hearing
762 was reduced to writing as given, and immediately subscribed by the witnesses; that upon appeal to the Commissioner of the General Land Office, such Commissioner found and adjudicated that there had been no discovery on October 11, 1893, on said Ophir lode, and on appeal to the Secretary of the Interior, such Secretary found and adjudicated, on December 28, 1895, and again on March 11, 1896, that no discovery had been made; that in pursuance of such findings and adjudication, the said mineral entry was cancelled as to said Ophir lode; that it was further found and adjudicated by said Commissioner and Secretary that the discovery shaft on said Ophir lode was, on October 11, 1893, only twenty-five feet deep, and that the sinking of this shaft was the only work that defendants had ever performed on said lode prior to that time. (Record folios 26–28.)

2. The said supreme court erred in sustaining the ruling, order and judgment of the court below sustaining the demurrer of defendants to the third paragraph of plaintiff's replication to defendfendants' answer, and counter-claim, which said paragraph is as follows:

And the plaintiff, for further replication, alleges that on said hearing on October 11, 1893, the defendants appeared by their duly authorized attorney, and defendant J. J. Cone appeared in person; that on said hearing said Cone testified that shortly prior to giving his testimony he measured defendants' discovery shaft on said Ophir claim with a tapeline and that it was twenty-five feet deep, that no vein was discovered on or in the Ophir, and that no work had been done on said lode in the year 1893; that said testimony induced plaintiff, and others interested under him, to expend a large sum of money in exploring for mineral in the ground in conflict between the said Ophir and Tecumseh lodes; that defendants knew at all times that plaintiff and others under him were making such expenditures on the faith of the
763 truth of said testimony; and never contradicted the same; that if, on October 11, 1893, the defendants had done any work in 1893, or had ever sunk their discovery shaft to a greater depth than twenty-five feet, or had ever discovered a vein in such shaft on or in said Ophir lode this plaintiff, and those acting under

him, in the working and developing of said Tecumseh lode, were entirely ignorant of the fact; that plaintiff and those acting under him have expended in the development of said Tecumseh lode between ten and fifteen thousand dollars on the faith of the truth of said testimony, which defendants are now attempting, by denying the truth thereof, to take the entire benefit of; that to permit defendants to now dispute the truth of said testimony would work a fraud upon plaintiff and others acting under him in the expenditure of money as aforesaid in the working and developing of said Tecumseh mine. (Record folios 29–31.)

3. The said supreme court erred in sustaining the ruling, order and judgment of the court below excluding the decisions of the Secretary of the Interior, when offered in evidence by plaintiff, under which said decisions the entry of defendants of the Ophir lode was cancelled, and excluding Exhibit M, relating to such cancellation. (Record folios 721–745.)

4. That the said supreme court erred in sustaining the ruling, order and judgment of the court below excluding Exhibit A, being the original certificate of location of the Tecumseh lode, when the same was offered in evidence by plaintiff. (Record, folios 121–127.)

5. The said supreme court erred in sustaining the ruling of the court below in giving instruction- numbered three, four, five and six and sixteen, which said instructions are as follows:

764 3. What is meant by a vein or lode under the statute is a body of mineral or mineral-bearing rock, with defined boundaries, in the general mass of the mountain. This vein, lode, or body of mineralized rock must contain an appreciable quantity of some of the precious metals, such as gold and silver. While the vein must be found in rock in place, that is, separated by well-defined boundaries from the general mass of the mountain, it is not necessary that it should have these characteristics at the surface, or that it should be, theoretically, perfect in all respects as to all these characteristics. If the vein in continuing down passes or is included within walls of rock in place, it is a sufficient discovery, if it is sufficient in other particulars, that is, containing mineralized rock, bearing appreciable quantity of precious metal. Theoretically, a vein must have two walls which clearly separate it from the general mass of the mountain, but, for the purposes of this case, you are instructed that if there is a body of mineralized rock, containing appreciable quantities of some of the metals, and if it is found in place, it is not necessary that it should have two well-defined walls; it is, for practical purposes, a vein, if the mineralized body of rock, or the body of mineral, is found in the general mass of the mountain, and if it continues unbroken and without interruption, it is regarded as a vein whatever the boundaries may be; and if it contains such a showing of mineral in connection therewith as that a competent miner would be willing to follow it in prospecting, in the expectation of reaching thereby richer or larger quantities of ore beyond. Such a vein may be very thin or wide, or it may be rich or nearly barren. It is neither the width of the crevice, nor the richness of its contents that alone determine whether that which is discovered

is a vein or a lode within the meaning of the statutes. A
765 mineral vein or lode, whether small or large, rich or poor, at the point of discovery, if discovered and located in compliance with the acts of Congress and the statutes of the State, creates the title and the right of possession as set forth in these instructions.

4. The vein or lode which the law requires to be discovered, need not contain, as disclosed in the discovery shaft, ore or mineral, in the sense that it will pay for extraction or shipment, but the vein or lode must appear as a distinctive formation in the country rock, and appear therein in the nature of mineral or mineral-bearing rock, different in character and nature from the country rock enclosing it. And in this connection, in this definition, the elements are the body of mineral or mineral-bearing rock and the boundaries. With either of these things well established, very slight evidence may be accepted as to the existence of the other. A body of mineral or mineral-bearing rock in the general mass of the mountain, so far as it may continue unbroken, and without interruption, may be regarded as a lode or vein, whatever the boundaries may be. On the other hand, with well-defined boundaries, very slight evidence of such mineral would be sufficient to establish the existence of a lode. Such boundaries constitute a fissure, and if in such fissure mineral is found, although in small quantities, it may be called a lode or vein.

5. In this connection the court instructs you that it is not necessary to the existence of — a thing as a vein, that the mineral-bearing rock or the rock which carries the mineral, should be quartz; it may be any other kind of rock carrying mineral, even though the rock itself was originally of the same character, or composition, as the surrounding walls, and though it may be subsequently
766 changed or decomposed, by natural agencies from its original character, provided that one may detect in the ground and mark the boundaries between such mineral-bearing rock and its enclosing walls, or by assays establish the difference between the walls and the mineral-bearing rock.

6. The court instructs you that the statute requires that the vein or lode must be in place. This term indicates the body of the country which has been affected by the action of the elements, and which remains in its original state and condition, as distinguished from the superficial mass which may lie above it. A continuous body of mineral or mineral-bearing rock, extending through loose disjointed rocks, is a lode as fully as that which is found in the more regular formation; and if the lode is in the general mass of the mountain, as distinguished from slide, debris or tumble stuff on the surface, it is in place within the meaning of the act of Congress. If the principal part of the rock about the mineral is in its original position, according to the present structure of the mountain, the lode is in place although some masses of the rock or boulders may be associated with the ore.

16. The term "well-defined crevice," as used in the statute, is intended to mean a vein, or lode or ledge of mineral-bearing rock

between walls. In its practical application, however, it must be considered in connection with the character of the mineral deposit which is the subject of location. If the lode is very wide, or is horizontal, or exists with boundaries ascertainable by assays or analysis, then a discovery shaft sunk into or upon or through the same at a distance of ten feet or more below the surface, is in effect the exposure of such a well-defined crevice as the law requires, for, were it otherwise, many metal-if/erous lodes or deposits could not be located or appropriated at all. (Record folios 1823–1830 and 1840.)

767 These instructions, (all bearing on the same subject) were each and every one of them erroneous, for the reasons:

First. They are abstract in form. They were intended to apply to both the Tecumseh and the Ophir discovery shafts. There was no similarity between these shafts.

The Tecumseh shaft contained a well-defined crevice, and the only point of dispute was as to whether such crevice contained such mineral-bearing rock as would make it a vein. The Ophir shaft, at the depth of twenty-five feet, contained no crevice, and the only claim made for it was that the rock had been impregnated with mineral from a crevice that was reached at a depth of thirty-four feet.

Second. They authorized the jury to find that a vein was discovered in the Ophir shaft, at a depth of twenty-five feet, an evidence for which the highest claim that was or could be made was, that it tended to show that the country rock above the hanging wall of the vein subsequently discovered, had been impregnated with mineral from such vein.

Third. Instruction three authorized the jury to find that a vein had been discovered in the Ophir shaft, at a depth of twenty-five feet, notwithstanding no well-defined crevice had been reached; neither wall of a vein had been reached, and no point had been reached which subsequent development showed was within any boundaries or walls of a vein. All that was required was that, irrespective of walls, boundaries or formation, there should be "such a showing of mineral in connection therewith as that a competent miner would be willing to follow it in prospecting, in the expectation of reaching thereby richer or larger quantities of ore beyond."

Fourth. The fourth and fifth instructions, as applied to the

768 Ophir lode, practically advised the jury that any mineral-bearing rock that would assay would, irrespective of any fissure or its boundaries, constitute a vein.

Fifth. The sixth instruction authorized a body of mineral-bearing rock (as formerly defined) extending through loose, disjointed rocks, to be pronounced a vein.

Sixth. The sixteenth instruction entirely dispenses with any necessity of discovering a well-defined crevice (as required by the State statute) or a vein (as required by the act of Congress).

Seventh. Said instructions are not, as applicable to the Ophir shaft, based upon any evidence in the cause.

Eighth. None of said instructions properly define a vein within the meaning of the act of Congress requiring the discovery of a vein within the limits of the claim.

6. The said supreme court erred in sustaining the court below in giving instruction number eighteen, which said instruction is as follows:

18. Upon that point the court instructs you that unless you find from the evidence that the southwest corner of the Tecumseh claim fell upon precipitous ground, and within the lines of the rails of the Florence and Cripple Creek railroad, or so near to one or the other of them that the erection thereof would be interfered with by the passage of trains, and was for that reason impracticable, then you are instructed that it was the duty of the plaintiff to set his post at such corner. If, on the other hand, you should believe from the evidence, that the proper placing of such stake was within the lines of the rails of said road, then you are instructed that under
769 the statute such witness corner shall be set at the nearest practicable point. Whether this was done, you are to determine from the evidence in the case, and unless you should believe in that event that the said witness corner was set substantially at the nearest practicable point, the marking of said claim would be invalid. (Record folios 1843.)

7. The said supreme court erred in sustaining the ruling of the court below in refusing instructions numbered one and ten, and in giving instruction numbered twenty-one, which said instructions are as follows:

1. No location of a mining claim is valid unless the locator has sunk a discovery shaft deep enough to show a well-defined crevice, and, in addition thereto, has discovered the vein or lode within the limits of the claim; and, if the jury believe from the evidence that the Ophir claim was located in 1892; that during that year the discovery shaft was sunk to a depth from twenty-five to twenty-eight feet; that no well-defined crevice was shown therein, or that no vein or lode was discovered therein; that plaintiff perfected a valid location in 1894 by sinking a discovery shaft on the Tecumseh to the depth of at least ten feet from the lowest part of the rim of such shaft at the surface, and found a well-defined crevice therein, and discovered a vein or lode of mineral within the limits of the said Tecumseh claim; that he posted at the point of discovery on the surface a plain sign or notice, containing the name of the lode, the name of the locator and the date of discovery and marked the surface boundaries with six substantial posts, either of wood or stone, sunk in the ground, to wit: one at each corner and one at the center of each side line, marked on the side or sides which were in towards the claim; that plaintiff executed and filed the location cer-
770 tificate introduced in evidence; that plaintiff or any one claiming under him has done $100.00 of labor or improvements of said Tecumseh claim for each year since 1894, they will find the plaintiff is entitled to possession of the ground in conflict by virtue of a compliance with the statutes of the United States and the State of Colorado.

10. If the jury believe from the evidence that plaintiff has disclosed in his discovery shaft a well-defined crevice, containing mineral in appreciable quantities, by which is meant quantities which

can be weighed and assayed, and running from $1.00 to $3.00 or $4.00 per ton, and that such mineral is found in occasional spots in such crevices; and that this discovery was made prior to any similar discovery on the Ophir claim, and the plaintiff has complied with the laws of the State and the United States, as defined in these instructions, then your verdict will be for the plaintiff.

21. You are further instructed that while the statutes do not require that the discoverer of mineral or of a vein should sink his discovery shaft at the point of discovery, but may sink the same at any point within the exterior boundaries of the claim he may desire, nevertheless you are instructed that it must be sunk upon a vein within said boundaries, and that the right and extent of the lode mining location must be measured by and from such discovery shaft and its position within the lines of said location. (Record, folios 1790, 1804, 1846.)

8. That the said supreme court erred in sustaining the court below in giving instruction numbered twenty-four, which said instruction is as follows:

24. Upon this point the court further instructs you that the law does not presume a forfeiture by the failure to perform
771 annual labor, and the plaintiff, claiming that the Ophir lode became forfeited for such reason the burden of proving that the annual labor was not done thereon, is on the plaintiff; and unless he has shown you by a fair preponderance of the evidence that the work was not done, you are to determine that question in favor of the defendants. (Record, folio 1849.)

9. That the supreme court erred in holding that the record contains any competent testimony to show that defendants in error performed annual labor or made improvements on the Ophir claim of the reasonable value of $100 for the year 1897.

10. That the said supreme court erred in sustaining the ruling of *of* the court below refusing instructions six and thirteen asked by plaintiff below, which said instructions are as follows:

6. Where the vein in controversy is a true fissure vein, it cannot be said to be discovered until the shaft shows the existence of a fissure. A vein or lode authorized to be located is a crevice or fissure in the earth's crust containing rock in place carrying gold, silver or other valuable mineral deposits named in its statutes, and a crevice is an opening or fissure in the earth's crust; and before such crevice can be considered well defined, the opening or fissure must be so disclosed as that its existence can be established by proof, at the time when the discovery is claimed.

13. The jury are instructed that the distinguishing characteristics of a fissure vein are the opening in the earth's crust in which mineral may be deposited, and the deposit of mineral itself. Where one of these features is clearly established, the other may be established by a less conclusive amount of proof. Where one wall of a vein is disclosed, and a body of mineral is found adjoining it, it may be presumed that there is somewhere another boundary or
772 wall. But where no crevice and neither boundary of a crevice has been disclosed, the mere finding of country rock,

that in one instance furnishes an assay, cannot be received as sufficient proof of the existence and discovery of a fissure vein. (Record folio- 1792 & 1805.)

11. That the said supreme court erred in sustaining the instructions of the court below in regard to the view of the premises in controversy by the jury, and in its construction of said instruction which dispensed with such view by the entire jury in a body, which said instruction is as follows:

In reference to your visit to the premises in controversy, the court instructs you that you are to go to the said premises accompanied by and under the charge of the bailiff appointed by the court for such purpose.

Each party to the suit, under the statute, has the privilege of nominating one person, to be approved by the court, to attend with the jury in your view and investigation of said premises.

Such persons so selected and appointed by the court, who in this case are J. W. Carr, for the plaintiff, and James F. Smith, for the defendant, shall be authorized to act as guides to the jury and to point out to you such features in the premises as it is desirable that you should see and answer all questions touching the same propounded by you. Such guides, however, must not argue or discuss any questions involved in this case either with the jury or with each other in the presence of the jury, nor should you engage in any such discussion with them or either of them, nor should you permit any such discussion by them, nor should you talk with any other person or allow any other person to talk with you about the case. These guides should be with you only while you are engaged in your view and investigation of the premises, and at no
773 other time or place.

The court further instructs you that the object of your visit to, and examination of, the premises in controversy therein, is to enable you to see for yourselves, and to examine for yourselves, the physical situation, condition and surroundings of the premises; hence, whatever you learn by such view and examination, is available to enable you to determine the weight of the conflicting testimony of the witnesses respecting the matter upon which they have testified, and to enable you thereby the better to understand and to comprehend the testimony of the witnesses respecting the issues involved herein concerning said premises, and your verdict must be based upon the evidence before the court, thus the more intelligently applied by you from your view and examination of said premises. And you must not deliberate among yourselves, or discuss the case in any respect, or in any of its phases, until after you have returned from your view into open court, and sent by the court to your jury-room to consider your verdict.

The court wishes to impress upon the jury the necessity of strict observance and compliance by the jury, and also by the guides, in regard to the foregoing instructions, and in case of any attempt upon the part of the guides, or either of them to violate their duty, as explained to you in these instructions, the jury or any member thereof must at once interpose and put a stop thereto and report to

the court any infraction or violation by the guides of their simple duty, as outlined to you in these instructions. (Record folios 1784-1788.)

12. That said supreme court erred in holding that the view of the premises need not be had by the entire jury acting as a body, and that such view need be participated in by such jurors only as those who, in their discretion, saw fit so to do.

774 13. The said supreme court erred in holding that the venire was properly ordered by the court below; in sustaining the court below in not granting a new trial because of irregularity in ordering said special venire and in not reversing the judgment because of such irregularity.

14. The said supreme court erred in holding that said special venire was not made use of by the sheriff to pack a jury in said cause, and in not reversing said judgment by reason of this fact.

15. The said supreme court erred in holding that the conduct of one of the guides in making a survey and pointing out to the jury while viewing the premises the place where, as he claimed, the southwest corner post of the Tecumseh claim would fall by right, was not a ground for a new trial.

16. The said supreme court erred in holding that the various separations of the jury while hearing the case, and after the submission of the same, as shown by the evidence, did not constitute a ground for a new trial..

17. The said supreme court erred in holding that the newly discovered testimony impeaching the credibility of the witness Smith did not furnish a ground for a new trial.

18. The said supreme court erred in holding that certain samples of rock offered in evidence, on rebuttal, and the testimony in relation thereto, were not rebutting evidence, and were properly excluded on this ground.

19. The said supreme court erred in holding that discoveries in shafts other than the discovery shaft cannot be taken into consideration for any purpose on the trial of an adverse suit.

775 20. The said supreme court erred in holding that there was evidence to support the verdict, in view of the facts:

First. That there was no evidence that a vein, within the meaning of the act of Congress, was discovered in the Ophir shaft prior to the discovery of such vein in the Tecumseh shafts.

Second. That there was no legal and competent evidence that labor and improvements of the value of $100 were made and performed on said Ophir claim for the year 1897.

21. That the said supreme court erred in holding that after a valid location has once been made, a locator need not perform any labor or make any improvements, annually, in order to maintain his title, as against the United States, or as against any one else who has not relocated the claim by reason of a forfeiture, and be entitled, in the adverse suit, to such a verdict and judgment as were rendered and entered in this cause.

22. That the said supreme court erred in holding that willful use of false testimony, and the manufacture of fictitious evidence by

what is known as the "salting" of the Ophir shaft, was not a ground of reversal of the judgment in said cause.

23. That the said supreme court erred in not reversing the judgment herein, instead of affirming the same.

Wherefore, the said plaintiff in error prays that the judgment aforesaid may be reversed, annulled and altogether held for nothing, and that he may be restored to all things which he hath lost by occasion of the judgment of said supreme court of the State of Colorado.

H. B. JOHNSON,
Attorney for Plaintiff in Error.

Endorsed: Filed in supreme court Feb. 12, 1901. Horace G. Clark, clerk.

776 I, Horace G. Clark, clerk of the supreme court of the State of Colorado, do hereby certify that the foregoing is a true copy of a petition for a writ of error, and an assignment of errors in the above-entitled cause, now remaining of record in my office.

Witness my hand and the seal of the court, affixed at my office, in the city of Denver, this 12th day of February, A. D. 1901.

[Seal Supreme Court, State of Colorado.]

HORACE G. CLARK, *Clerk.*

777 [Endorsed:] No. —. In supreme court, State of Colorado. —— —— *vs.* —— ——.

778 Know all men by these presents, that we, Joseph H. Beals of Denver, Colo., as principal, and The American Bonding and Trust Company of Baltimore City, as surety, are held and firmly bound unto James J. Cone and Lyman Robison, in the full and just sum of five hundred dollars, to be paid to the said James J. Cone and Lyman Robison, certain attorney, executors, administrators, or assigns: to which payment, well and truly to be made, we bind ourselves, our heirs, executors, and administrators, jointly and severally, by these presents.

Sealed with our seals and dated this 18th day of February, in the year of our Lord one thousand nine hundred and one, 1901.

Whereas, lately at a term of the supreme court of the State of Colorado, in a suit pending in said court, between Joseph H. Beals, plaintiff in error, and James J. Cone and Lyman Robison defendants in error, a judgment was rendered against the said Joseph H. Beals, and the said Joseph H. Beals having obtained a writ of error and filed a copy there- in the clerk's office of the said court to reverse the judgment in the aforesaid suit, and a citation directed to the said James J. Cone and Lyman Robison citing and admonishing them to be and appear at a Supreme Court of the United States, at Washington, within thirty days from the date thereof.

Now, the condition of the above obligation is such, that if the said Joseph H. Beals shall prosecute said writ of error to effect, and answer all damages and costs if he fail to make his plea good, then

the above obligation to be void; else to remain in full force and virtue.

JOSEPH H. BEALS. [SEAL.]
THE AMERICAN BONDING AND TRUST COMPANY OF BALTIMORE CITY,
By RALPH W. SMITH, *Vice-President.* [SEAL.]

Attest:
[SEAL.] JUNE MOWER, *Assistant Secretary.*

Sealed and delivered in presence of—
——— ———.

Approved by—
DAVID J. BREWER,
Associate Justice of the Supreme Court of the United States.

March 22nd, 1901.

779 BALTIMORE, MD., *Dec. 3rd*, 1900.

I, Samuel H. Shriver, secretary of the American Bonding and Trust Company of Baltimore City, hereby certify that the following is a full, true, and complete copy of the record of the proceedings of the meeting of the board of directors of said company in so far as same shows that the resolution hereinafter referred to was regularly presented and adopted by said board, to wit:

"FEBRUARY 13, 1900.

"The board met today, the following members present * * * the same being a quorum.

"Mr. Ernest Hoen, Jr. (a member of said board) presented the following resolution and moved its adoption, seconded by Mr. R. H. P. Ellis (a member of said board):

"Resolved, That Ralph W. Smith, of Denver, Colorado, and June Mower, of the same place, be and are hereby appointed resident vice-president and assistant secretary, respectively, of this company at Denver, Colorado, with power to execute the bonds on behalf of the company for its business and in accordance with its charter. That in the absence of the said Ralph W. Smith, H. B. Johnson, of the same place, be and is hereby authorized to act as resident vice-president with the same power as the said Ralph W. Smith; and in the absence of the said June Mower, or his inability to act as resident assistant secretary, George C. Kellogg, of the same place, be and is authorized to sign all bonds and undertakings issued by the company as assistant secretary, in attestation of the seal of the company affixed thereto.

"The question being put, all members present voted in the affirmative, the motion was declared adopted."

In testimony of the correctness of the foregoing abstract of the record of the proceedings of the board of directors of the American Bonding and Trust Company of Baltimore City, I have hereunto

subscribed my name, and affixed hereunto the seal of the company the day and year first hereinbefore written.

780 SAMUEL H. SHRIVER,
Secretary of the American Bonding and Trust Company of Baltimore City.

UNITED STATES OF AMERICA, *District of Colorado,* } ss:

I, Charles W. Bishop, clerk of the district court of the United States for the district of Colorado, sitting at Denver, do hereby certify that the American Bonding and Trust Company of Baltimore City has fully complied with the requirements of the act of Congress approved August 13th, 1894, entitled "An act relative to recognizance, bonds, and undertakings, and to allow certain corporations to be accepted as surety thereon" and has filed in my office a power of attorney authorizing Ralph W. Smith, vice-president, to execute bonds for said company in the district of Colorado.

In testimony to the above, I do hereunto sign my name and affix the seal of said court, at Denver, in said district, this 18th day of February, A. D. 1901.

[SEAL.] CHARLES W. BISHOP, *Clerk.*

SUPREME COURT, *State of Colorado,* } ss:

I, Horace G. Clark, clerk of the supreme court of the State of Colorado, do hereby certify that the above and foregoing pages numbered from one to three inclusive, to be a true, perfect and complete transcript and copy of a bond and certificates thereto attached, heretofore filed in said court, and in a certain cause lately in said court pending, wherein Joseph H. Beals was appellant and James J. Cone and Lyman Robison were appellees, as fully and completely as the same still remain on file or of record in my office at

781 Denver.

In witness of the above, I do hereunto sign my name and affix the seal of said court, at Denver, in said State, this 17th day of April, A. D. 1901.

[Seal Supreme Court, State of Colorado.]

HORACE G. CLARK,
Clerk of Supreme Court, Colorado.

782 UNITED STATES OF AMERICA, ss:

To James J. Cone and Lyman Robison, Greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States, at Washington, within 30 days from the date hereof, pursuant to a writ of error, filed in the clerk's office of the supreme court of the State of Colorado wherein Joseph H. Beals is plaintiff in error and you are defendants in error, to show cause, if any there be, why the judgment rendered against the

said plaintiff in error as in the said writ of error mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable David J. Brewer, associate justice of the Supreme Court of the United States, this 22d day of March, in the year of our Lord one thousand nine hundred and one.

DAVID J. BREWER,
Associate Justice of the Supreme Court of the United States.

783 Service of within citation with copy — writ of error in said cause duly acknowledged this the 30th day of March, A. D. 1901.

C. S. THOMAS,
WM. H. BRYANT,
Att'ys for Defendants in Error Therein Named.

784 UNITED STATES OF AMERICA, *ss:*

The President of the United States of America to the honorable the judges of the supreme court of the State of Colorado, Greeting:

[Seal of the Supreme Court of the United States.]

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said supreme court before you, or some of you, being the highest court of law or equity of the said State in which a decision could be had in the said suit between Joseph H. Beals, appellant, and James J. Cone and Lyman Robison, appellees, wherein was drawn in question the validity of a treaty or statute of, or an authority exercised under, the United States, and the decision was against their validity; or wherein was drawn in question the validity of a statute of, or an authority exercised under, said State, on the ground of their being repugnant to the Constitution, treaties, or laws of the United States, and the decision was in favor of such their validity; or wherein was drawn in question the construction of a clause
785 of the Constitution, or of a treaty, or statute of, or commission held under the United States, and the decision was against the title, right, privilege, or exemption specially set up or claimed under such clause of the said Constitution, treaty, statute, or commission; a manifest error hath happened to the great damage of the said appellant as by his complaint appears. We being willing that error, if any hath been, should be duly corrected, and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same in the said Supreme Court at Washington, within 30 days from the date hereof, that the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error, what of right, and ac-

cording to the laws and customs of the United States, should be done.

Witness the Honorable Melville W. Fuller, Chief Justice of the United States, the 22d day of March, in the year of our Lord one thousand nine hundred and one.

JAMES H. McKENNEY,
Clerk of the Supreme Court of the United States.

Allowed by
DAVID J. BREWER,
Associate Justice of the Supreme Court of the United States.

786 In the Supreme Court of the State of Colorado.

JOSEPH H. BEALS, Appellant,
vs.
JAMES J. CONE and LYMAN ROBISON, Appellees.

In obedience to the command of the foregoing writ of error, I do hereby transmit a true and complete copy of the record and proceedings in the cause in said writ mentioned with all things concerning the same.

Witness my hand and the seal of the said supreme court of the State of Colorado, at my office in said State this 6th day of April, A. D. 1901.

[Seal Supreme Court, State of Colorado.]

HORACE G. CLARK,
Clerk of said Supreme Court.

Endorsed on cover: File No. 18,122. Colorado supreme court. Term No. 300. Joseph H. Beals, plaintiff in error, *vs.* James J. Cone and Lyman Robison. Filed April 20, 1901.